

Funding Proposal

FP156: ASEAN Catalytic Green Finance Facility (ACGF): Green Recovery Program

Multiple Countries | Asian Development Bank (ADB) | Decision B.28/04

6 April 2021



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Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the [GCF Information Disclosure Policy](#), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

Please submit the completed proposal to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

"FP-[Accredited Entity Short Name]-[Country/Region]-[YYYY/MM/DD]"

LIST OF ABBREVIATIONS

ACGF – ASEAN Catalytic Green Finance Facility

ACGF GRP – ASEAN Catalytic Green Finance Facility: Green Recovery Program

ADB – Asian Development Bank

AE – Accredited Entity

AIF – ASEAN Infrastructure Fund

APR – Annual Performance Report

ASEAN – Association of Southeast Asian Nations

ASSC – ASEAN Socio-Cultural Community

CO₂ – carbon dioxide

COVID – coronavirus-related disease

DSCR – Debt Service Coverage Ratio

EE – Executing Entity

EIA – Environment Impact Assessment

EMP – Environmental Management Plan

ESMF – Environment and Social Management Framework

ESMS – Environment and Social Management System

ESS – Environment and social safeguards

FIRR – financial internal rate of return

GCF – Green Climate Fund

GDP – Gross domestic product

GESIAP – gender and social inclusion action plan

GHG – greenhouse gases

IEE – Initial Environmental Examination

IFI – International Financial Institution

MDB – Multilateral development bank

MW – megawatt

NDA – National Designated Authorities

NDC – Nationally Determined Contribution

NOL – No-objection Letter

OECD – Organisation for Economic Co-operation and Development

PPP – Public-Private Partnerships

SDG – Sustainable Development Goals

SPS – Safeguards Policy Statement

TA – Technical assistance

A. PROJECT/PROGRAMME SUMMARY															
A.1. Project or programme	Programme	A.2. Public or private sector	Public												
A.3. Request for Proposals (RFP)	Not applicable														
A.4. Result area(s)	<p>Check the applicable GCF result area(s) that the overall proposed project/programme targets. For each checked result area(s), indicate the estimated percentage of GCF budget devoted to it. The total of the percentages when summed should be 100%.</p> <table border="0"> <tr> <td> Mitigation: Reduced emissions from: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Energy access and power generation: <input checked="" type="checkbox"/> Low-emission transport: <input checked="" type="checkbox"/> Buildings, cities, industries and appliances: <input checked="" type="checkbox"/> Forestry and land use: </td> <td> GCF contribution: <u>33%</u> <u>30%</u> <u>25%</u> <u>12%</u> </td> </tr> <tr> <td> Adaptation: Increased resilience of: <ul style="list-style-type: none"> <input type="checkbox"/> Most vulnerable people, communities and regions: <input type="checkbox"/> Health and well-being, and food and water security: <input type="checkbox"/> Infrastructure and built environment: <input type="checkbox"/> Ecosystem and ecosystem services: </td> <td> Enter number% Enter number% Enter number% Enter number% </td> </tr> </table>			Mitigation: Reduced emissions from: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Energy access and power generation: <input checked="" type="checkbox"/> Low-emission transport: <input checked="" type="checkbox"/> Buildings, cities, industries and appliances: <input checked="" type="checkbox"/> Forestry and land use: 	GCF contribution: <u>33%</u> <u>30%</u> <u>25%</u> <u>12%</u>	Adaptation: Increased resilience of: <ul style="list-style-type: none"> <input type="checkbox"/> Most vulnerable people, communities and regions: <input type="checkbox"/> Health and well-being, and food and water security: <input type="checkbox"/> Infrastructure and built environment: <input type="checkbox"/> Ecosystem and ecosystem services: 	Enter number% Enter number% Enter number% Enter number%								
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A.5. Expected mitigation impact	119 million tCO ₂ eq over lifespan	A.6. Expected adaptation impact													
A.7. Total financing (GCF + co-finance)	<u>300 million USD</u> GCF financing (revolved to provide USD 635 million) + USD 3,385 of co-financing at sub-project level will support total investments of USD 4,020 million (see C).	A.9. Project size	Large (Over USD 250 million)												
A.8. Total GCF funding requested	<u>300 million USD</u> <i>For multi-country proposals, please fill out annex 17.</i>														
A.10. Financial instrument(s) requested for the GCF funding	<p>Mark all that apply and provide total amounts. The sum of all total amounts should be consistent with A.8.</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Grant</td> <td><u>20 million</u></td> <td><input type="checkbox"/> Equity</td> <td><u>Enter number</u></td> </tr> <tr> <td><input checked="" type="checkbox"/> Loan</td> <td><u>280 million</u></td> <td><input type="checkbox"/> Results-based payment</td> <td><u>Enter number</u></td> </tr> <tr> <td><input type="checkbox"/> Guarantee</td> <td><u>Enter number</u></td> <td></td> <td></td> </tr> </table>			<input checked="" type="checkbox"/> Grant	<u>20 million</u>	<input type="checkbox"/> Equity	<u>Enter number</u>	<input checked="" type="checkbox"/> Loan	<u>280 million</u>	<input type="checkbox"/> Results-based payment	<u>Enter number</u>	<input type="checkbox"/> Guarantee	<u>Enter number</u>		
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A.11. Implementation period	<p>The program implementation period is between 2021 and 2039.</p> <p><u>Disbursement</u> GCF loans</p> <ul style="list-style-type: none"> • 1st investment phase (from GCF to sub-projects): 2021-2027. • 2nd investment phase (revolved GCF principal to sub-projects): 2028-2039 <p>GCF TA grants: 2021 – 2030</p> <p><u>Repayment of GCF funds</u></p> <ul style="list-style-type: none"> • Repayment of interest on GCF loans: 2021 to 2050 • Repayment of GCF principal: 2038 to 2050 	A.12. Total lifespan	<p>The program lifespan (from first disbursement to final repayment) will be for thirty (30) years between 2021 and 2050.</p>
A.13. Expected date of AE internal approval	<p>ACGF GRP is a distinct ADB-managed program implemented under the ACGF framework. ADB internal approval of ACGF GRP is expected in June 2021.</p> <p>Individual sub-projects have their own approval dates, with the first project to be approved in Q3 2021.</p>	A.14. ESS category	<p>I-1</p>
A.15. Has this FP been submitted as a CN before?	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	A.16. Has Readiness or PPF support been used to prepare this FP?	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
A.17. Is this FP included in the entity work programme?	<p>¹Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	A.18. Is this FP included in the country programme?	<p>Yes <input type="checkbox"/> No² <input checked="" type="checkbox"/></p>
A.19. Complementarity and coherence	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>		
A.20. Executing Entity information	<p>Asian Development Bank</p>		
A.21. Executive summary (max. 750 words, approximately 1.5 pages)			

¹ ADB regularly discusses pipeline with GCF management and this program has been part of these conversations.

² Please note that the program – as a post Covid-19 green jobs and green infrastructure recovery package - has been discussed with all countries' representatives, as a matter of urgency, and is currently not reflected in country programs.

The ASEAN Catalytic Green Finance Facility: Green Recovery Program (ACGF GRP) is an urgently needed and pioneering initiative which aims to embed three integrated objectives into the mainstream of countries' economic recovery planning post the COVID-19 pandemic: a) *"green infrastructure development"*, b) *"catalyzing of capital"* from all sources – commercial, private and public, and, c) *urgent need for upscaling* such efforts through a programmatic approach developing - rapidly - a large pipeline of projects.

The program's integrated approach will mitigate against the slowing momentum, and even reversal, of progress towards countries mitigation commitments under the Paris Agreement, resulting from the immense pressure to direct government budgets towards relief measures to counteract the COVID-19 pandemic. While aimed at ASEAN countries, with no "green deal" yet in evidence across most of Asia, the program also has immense replication potential in the region.

The ACGF GRP proposes to meet the above three objectives through a distinct program, associated with the ACGF vehicle, which benefits from both *strong country ownership* and *excellent governance* systems, given that ACGF, as a part of the ASEAN Infrastructure Fund, is owned by all ASEAN member states along with ADB and is managed by a skilled ADB team – one of the first such regionally-owned vehicles in the world.

The proposed ACGF GRP will integrate a) the *structuring of innovative leveraged/blended finance models for bankability*, which best leverage each unit of ACGF GRP funds to catalyze a multiple of capital from other sources into projects, b) adherence to global best practices in selecting and setting targets for *"Green and Priority Green"* sub-projects (building on joint MDBs best practice and EU and CBI Taxonomies, developed jointly with European and Asian partners), and c) *upscaling of capital market instruments* for greater access to green capital flows. Through a revolving use of funds the program aims to target at least 20 projects over its lifecycle, with an emphasis on working with National Development Banks and GCF Direct Access Entities, where feasible.

The ACGF GRP is designed therefore as a highly additional first regional "Green Recovery" program for Asia, without which catalytic low-emission projects would not be prioritized within development programs in the region. The program will kickstart a *cycle of low emissions' climate change mitigation investments* in the initial years of COVID recovery (starting in 2021). It will capitalize on a very limited time window of opportunity to influence stimulus packages, help countries to refocus on NDCs, avoid a rebound in emissions and environmental degradation, and stimulate growth by creating 'green' jobs. With a strong signaling effect to governments across the region it will demonstrate practical action for a green recovery by integrating international standards for climate impact, thereby paving the way for the development of longer-term low-carbon project pipelines and creating grounds for broad paradigm shift in Southeast Asia.

Developing countries in Southeast Asia have historically seen their **economic growth paired with increased carbonization**, illustrating significant challenges in balancing economic growth and low-carbon development. Electricity demand in the region has grown at 6% year (one of the fastest in the world), largely supported by a doubling in fossil fuel use. Carbon intensive growth in Philippines, Indonesia and Malaysia is driven by industrialization and expanding urbanization, fossil fuels dominating the power supply, and increasing demand for passenger and freight transport. Deforestation and forest degradation continues to destroy critical carbon sinks across Cambodia, Indonesia and Lao PDR. Southeast Asia also presents fast-changing climatic vulnerabilities because of global warming, including increasing average temperatures estimated at between 0.14°C–0.20°C per decade since the 1960s, sea-level rising and erosions of coastline, and increase in extreme weather events.

While progress has been made in the last 5 years to scale up green infrastructure, the global **COVID-19 crisis has severely affected the momentum on climate action** that was gathering pace in 2018-19. ADB estimates that Southeast Asia's economy will contract by 4.4% in 2020. With public budgets being diverted to support COVID emergency response, government funds for NDC implementation have been slashed, and across the region investment in green infrastructure has slowed or stopped completely. In Indonesia alone, public budgets supporting renewable energy projects have been reduced by over 40%. ASEAN countries have committed an estimated USD 250 billion towards COVID-19 response and recovery, but these programs do not support a green recovery, and in fact, some may even support a rebound in emissions. Across the region, subsidies have been provided to fossil-fuel reliant state utilities and enterprises, and some countries have witnessed a roll-back in environmental regulations, threatening increased deforestation.

There is a limited **window of opportunity to influence COVID recovery starting in 2021**, when multi-year stimulus packages will start being rolled out by governments. Rapid action is needed to signal the importance and benefits of a green recovery, as well as to prepare and finance high-impact low-emission projects that create green jobs and demonstrate how a green recovery can be pursued in the next 5 to 10 years. Should ASEAN governments fail to prioritize low-emission choices within COVID-recovery packages starting in 2021, they risk locking-in emissions-intensive project pipelines for the next two to three decades.

The ACGF Green Recovery Program (ACGF GRP) proposes a **comprehensive, country-owned, multi-instrument approach** to support countries pursue a low-emission COVID-19 recovery path. The program will support developing ASEAN countries to refocus on climate change mitigation as part of COVID-19 recovery, strengthening alignment with the Paris Agreement and providing the foundation for more ambitious NDCs by:

- Representing the **first substantive green recovery program** in Southeast Asia, designed to kickstart investments through combined support for innovative project model development and provision of de-risking loan funds. Revolving use of USD 300 million of GCF funds provide USD 635 million in actual GCF technical assistance and loans, to leverage a further USD 3.3 billion of co-financing from ADB and other partners to support total sub-projects of over USD 4 billion.
- Mobilizing **substantial global green capital flows**, both through projects as well as through further replication of these across the region at scale, by catalyzing a further USD 4 in additional private / commercial finance for every GCF USD 1 spent³, through green bonds, hybrid public-private partnerships (PPPs) and other innovative financing models.
- Enabling investments in high climate potential infrastructure, expected to **directly reduce 119 million tonnes CO₂** (lifetime emissions) **and create at least 340,000 ‘green’ jobs**, demonstrating the benefits of a green recovery (with co-benefits in terms of gender and social inclusion), thereby supporting implementation of low carbon solutions throughout the economy.
- Supporting governments to **prioritize low-emission projects within infrastructure pipelines**, especially in immediate post-COVID recovery (2021 – 2026), strengthening project pipelines, shaping bankability and other enabling environment factors that will facilitate further green investments.
- Transforming ADB’s pipeline for the region (around USD 5 to USD 6 billion committed per year), building on ADB’s climate operations, to scale up a **more ambitious and transformative generation of high-performing, low-emission projects** while tackling the financing challenges emerging from the COVID-19 crisis.

The ACGF GRP is a ring-fenced program managed by ADB and associated with ACGF, a vehicle under the ASEAN Infrastructure Fund which is owned by ASEAN governments and ADB. Through clear limits on GCF funds usage per sub-project (15% - 25%), **mandatory co-financing requirements at the sub-project level**, and the revolving use of funds, the program will ensure the creation of at least \$4 billion worth of projects over 30 years. Sub-project level co-financing requirements will be fulfilled by ADB before flow of any GCF funds, ensuring that sub-project financing needs are met by ADB, either through its own resources (at a minimum) or from other partner financial institutions (if available).

Through its association with ACGF, the ACGF GRP is strongly backed by ministries of finance, who will act as focal points for the program in their national contexts. The program will place a special emphasis on working with National Development Banks and GCF Direct Access Entities like PT SMI, Development Bank of Philippines etc.

Designed to target the major sources of emissions in the region, the ACGF GRP will support multiple sectors targeting a) investments that reduce CO₂ emissions from fossil fuels (i.e. renewable energy, energy efficiency in industry and buildings, low-carbon transport and green multisector projects), and b) greenhouse gas (GHG) emissions from land-use change (reforestation and sustainable forest management, low-carbon agriculture and fisheries). Altogether, ACGF GRP investments will support significant progress towards the SDGs, through the installation of at least 800 MW of renewable energy capacity; supporting modal shift to railways and public transport models, and supporting the management / reforestation of at least 80,000 hectares of forest land.

³ Private and commercial capital catalyzed given here is additional to the total project costs considered in this proposal, and is for expected additional capital expenditures covered by private and commercial actors (see D6).

B. PROJECT/PROGRAMME INFORMATION

B.1. Climate context (max. 1000 words, approximately 2 pages)

This section presents aggregated trends for the region, building on country profiles provided in annex 2B.

Together, ASEAN countries account for 8.5% of global population (a combined population of 649 million people)⁴, and the fifth largest GDP in the world⁵. Prior to COVID-19, the region's GDP tripled in the last two decades, growing at 5.3% per year from 2000 to 2018, as a result of a rapid structural transformation. Within the region, socio-economic contexts vary widely, with countries like Cambodia and Lao PDR at the lower end of the lower-middle income bracket, Indonesia, Philippines, at the higher end, and Malaysia classed as an upper-middle income country. Despite progress, poverty persists in the region, especially in lower-middle income members, ranging from 9-10% in Indonesia, to 21-24% in Lao PDR and the Philippines, in 2017⁶.

A. BASELINE: CARBON-INTENSIVE ECONOMIC GROWTH WORSENER BY COVID-19

Increasing energy-related CO₂ emissions. Due to increasing dependence on coal and gas-fired power growth of energy-related emissions in Southeast Asia was amongst the fastest in the world between 2007 and 2017, relative to other regions⁷. Energy-related CO₂ emissions are driven by rising incomes, coupled with urbanization and industrialization. Oil for transport and electricity for buildings together have accounted for almost 50% of the increase in final energy consumption in the region since 2000⁸. Electricity demand across ASEAN countries grew at 6% in 2019, amongst the fastest in the world, largely supported by a doubling in fossil fuel use, with coal and gas fired generation driving increasing electrification.

Persisting deforestation and loss of carbon sinks. Land-use change and agriculture together contributed over half the region's GHG emissions in 2016 (See annex 2B). The region has 15% of the world's tropical forests, and is also a major deforestation hotspot, with a deforestation rate comparable to only that of Latin America. A recent analysis⁹ estimates that Southeast Asia lost 80 million hectares of forest between 2005 and 2015, with most carbon stocks lost in Indonesia (62%), and the remaining in Malaysia (17.4%) and Cambodia (4.6%). In Cambodia and Lao PDR, which have relatively low energy-related carbon footprints, land-use change related emissions are the major source. In Indonesia, despite producing the most carbon intensive electricity in 2019¹⁰, most emissions still come from land use change, largely driven by deforestation of tropical forests.

Insufficient improvements in immediate pre-COVID period. Recent years have shown an improvement in the carbon intensity of growth in most countries; however, these are not sufficient to drive a significant paradigm shift to achieve decarbonization of the economy as required by the temperature goals of the Paris Agreement. Modest improvements in energy efficiency and clean energy generation in the last decade are not adequate to redress the steady growth in emissions in most ASEAN countries over the past 50 years¹¹. Key issues include:

- *Future emissions gap expected, despite NDCs.* Even if all targets in the NDCs were met¹², emissions in the region would be approximately 415 mt CO₂e higher than what would be needed to meet the goals of the Paris Agreement, implying that a further 11% reduction in emissions would be needed.

⁴ ASEAN Secretariat 2019, ASEAN Statistical Leaflet 2019, Jakarta.

⁵ ASEAN Secretariat 2019, Key Figures 2019, Jakarta.

⁶ Ibid footnote 4.

⁷ SE Asia energy-related emissions growth was second only to South Asia. Full analysis given in Annex 2B and based on IEA (2019), CO₂ Emissions from Fuel Combustion

⁸ IEA (2019), Southeast Asia Energy Outlook 2019

⁹ Estoque, R.C., Ooba, M., Avitabile, V. et al. The future of Southeast Asia's forests. Nat Commun 10, 1829 (2019).

<https://doi.org/10.1038/s41467-019-09646-4>

¹⁰ According to the Harmonized IFI dataset for grid CO₂ emission factors (2019 update), Indonesia's electricity footprint (for firm energy) is 658 gCO₂ / kWh, compared with 470gCO₂/ kWh in Malaysia, 489gCO₂/kWh in the Philippines, 390 gCO₂/kWh in Thailand, and 356 gCO₂/kWh in Viet Nam.

¹¹ Suwin Sandu, Mui Yang, Teuku Meurah, Indra Mahlia, Wongkot Wongsapai, Hwai Chyuan Ong, Nandy Putra and S. M. Ashrafur Rahman(2019), Energy-Related CO₂ Emissions Growth in ASEAN Countries: Trends, Drivers and Policy Implications, in *Energies*, <https://www.mdpi.com/journal/energies>.

¹² Paltsev et al. 2018. Pathways to Paris: ASEAN. MIT Joint Program Special Report

- Current NDC implementation not on track. With few exceptions (e.g. the Philippines¹³), ASEAN countries are not on target in the implementation of their NDCs and in aligning their climate actions with the Paris Agreement.
- Significant investment gap. Countries in the region require USD 210 billion per year between 2016 and 2030 to support needed investment in climate-compatible infrastructure, and even before the COVID-19 crisis, the region faced a substantial investment gap¹⁴.

Major impact of COVID-19 on low-emission investments in the region. The COVID-19 health crisis has had a major impact on the region. ADB estimates that the regional economy will contract by 4.4% in 2020, impacting countries' abilities to implement NDCs:

- Public budgets diverted to COVID response. Public budgets are increasingly constrained due to support needed for COVID-related emergency response, including cash transfers, SME support programs, support for state owned companies and banks, support for health care etc. Public budgets continue to remain the major source of financing for low-emission projects, and in 2020, infrastructure investment in the region has slowed and even halted in some cases.
- Risk of high-carbon projects taking precedence in COVID recovery. In a rush to scale up recovery, initial examples illustrate the risk of governments prioritizing more 'shovel-ready' projects which may not necessarily have high climate benefits over climate-positive infrastructure projects, which may take more time and resources to develop. In Indonesia, for example, public funding for renewable energy projects has been reduced by over 40%, while at the same time, fossil-fuel reliant state-owned utilities across the region are being subsidized as part of COVID response.
- Private and commercial financing severely affected. The economic downturn has severely impacted commercial banks, and private investors are more risk-averse than ever. Foreign direct investment for infrastructure across Asia is expected to continue to drop in 2020, and Belt and Road infrastructure investments – which have been a major mobilizer of private finance in the region – are expected to be delayed.

The combined challenge for ASEAN countries of rising emissions and the acute shock of COVID-19 on budgets and macro-economic profiles of all countries, means that the full range of interventions (policy-based, capacity building and financial resources) is required, and that it needs to come fast, systemic and at scale.

B. COUNTERFACTUAL: REBOUND IN EMISSIONS AND LOCK-IN OF CARBON INTENSIVE GROWTH

No evidence of a 'green deal' for ASEAN yet. As illustrated in the European Union and Korea, a 'green deal' for COVID recovery can support economic growth while reducing emissions. Based on recent estimates, ASEAN countries have invested over USD 250 billion in economic recovery and response for COVID-19 (see Annex 2B), and these stimulus packages provide a major, time-limited opportunity to promote low-emission growth and development. However, as yet, there is no evidence of substantial green recovery actions in the region. In fact, some COVID-19 response measures explicitly support activities that could cause a rebound in emissions. Bailout packages are being considered for airlines (without specific green conditions), and some countries are supporting state-owned power utilities heavily dependent on fossil-fuel power generation.

Limited time window to turn the tide on green recovery. Governments need to prioritize a green recovery in the immediate post-COVID period (2021-2026) when infrastructure investments planned in Indonesia, Philippines and Malaysia, among other countries, begin to restart as a way of promoting growth and jobs. Without GCF support, tentative low-emission projects currently in government pipelines (like the projects presented in this proposal) which require additional support to develop and finance, risk remaining tentative or being delayed indefinitely. Support to create further 'finance-ready' low-emission projects, which could take 8-10 months at a minimum, must start as soon as possible for these projects to influence planned stimulus packages and programs.

¹³ <https://climateactiontracker.org/countries/philippines/>

¹⁴ Infrastructure investment gap estimated at between 3.8% of gross domestic product (GDP) to 4.1% of GDP (when taking climate change into account) between 2016-2020 in selected ASEAN member countries.

Lock-in of emissions intensive investment for the next two decades. Lack of investment in a program such as ACGF GRP which supports governments to prioritize low-carbon alternatives would result in a quick rebound of GHG emissions and lock-in of non-green infrastructure, such as development of coal-fired electricity generation, lack of attention towards nature-based solutions, or investment in transport systems that encourage private car usage rather than public transport. NDCs will continue to be insufficiently ambitious, and the region's energy intensity may increase or at least decrease more slowly than in other non-OECD countries.

Continuation of carbon-intensive growth trends. The following trends are likely to continue in the face of the COVID-19 crisis, without concerted action through programs like the ACGF GRP:

- Continued dependence on coal and gas for electricity, and risk of stranded assets. Many ASEAN countries – especially Indonesia and Vietnam – continue to expand their coal plant capacity¹⁵. Looking forward, an analysis¹⁶ of current and planned fossil fuel generation plants in ASEAN countries shows that over 83% would be incompatible with a carbon budget commensurate with the 1.5°C temperature goal. If all coal power plants are built as planned, Southeast Asia is also expected to see about 70,000 emissions-related deaths by 2030, with Indonesia and Vietnam expected to experience the highest number of fatalities¹⁷.
- Slow scale up of renewables. Non-hydropower renewable sources for electricity generation have increased in past years (to around 20% in 2016), especially driven by geothermal in Indonesia and bioenergy across the region, however the major potential for solar PV and wind is only starting to be realized, despite falling technology costs. Across all countries in the region the structure of electricity markets, financial health of state-owned utilities, and high cost of capital all affect the bankability of projects. In Cambodia and Lao PDR, these factors mean that the risks associated with projects are often too high for investors to engage.
- Major focus on road transport. Rapid increase in vehicle ownership and demand for freight has driven up demand for oil by more than 50% since 2000. Vehicle ownership reflects a pattern of mobility increasingly focused on road transport, with mass transit systems and electrified transport still relatively underdeveloped.
- Lack of comprehensive public transport systems. Other than capital cities like Bangkok, Jakarta or Manila, most secondary cities are yet to develop comprehensive public transport systems, and are heavily reliant on taxi systems as well as polluting and inefficient vehicles such as jeepneys (in Philippines) or three-wheelers (across many countries).

C. COMPLEMENTARITY WITH OTHER CLIMATE FINANCE MECHANISMS

The ASEAN Catalytic Green Finance Facility (ACGF, a facility of the ASEAN Infrastructure Fund [AIF]) is the only regionally-owned green finance initiative focused on developing and scaling up climate-positive projects in ASEAN countries. Associated with ACGF, and managed by ADB, the ACGF GRP will build on lessons learned during the ACGF pilot phase and will benefit from ADB's long-term and extensive engagement with ASEAN countries at both national and regional levels. The program will enhance ADB's existing climate operations in Southeast Asia to finance a new generation of high-performing, low-emission projects while tackling the financing challenges emerging from the COVID-19 crisis.

The program will operate in an established and changing architecture of climate finance in the region, supporting activities that build on existing climate finance mechanisms but are qualitatively different. The ACGF GRP has been designed to use climate finance catalytically (without a reliance on grants) to leverage a broader range of financing for high-performing low-emission investments, including from the private sector. In this context, the program will complement other ASEAN initiatives focused on infrastructure, such as the Master Plan on ASEAN Connectivity 2025, by promoting more low-carbon transport and energy. It will also complement other regional initiatives such as the ASEAN Australia Smart Cities Trust Fund¹⁸, the Southeast Asia Clean Energy Facility, and the UK's ASEAN Low Carbon Energy Programme, by supporting government-backed projects. It will also

¹⁵ Climate Analytics. May 2019. Decarbonising South and Southeast Asia: Shifting energy supply in South Asia and South East Asia to non-fossil fuel-based energy systems in line with the Paris Agreement long-term temperature goal and achievement of Sustainable Development Goals. Retrieved from <https://climateanalytics.org/media/decarbonisingasia2019-fullreport-climateanalytics.pdf>

¹⁶ Caldecott et al. 2018. Carbon Lock-in Curves and Southeast Asia: Implications for the Paris Agreement. Briefing Paper. <https://www.smithschool.ox.ac.uk/research/sustainable-finance/publications/Carbon-Lock-in-Curves-and-Southeast-Asia.pdf>

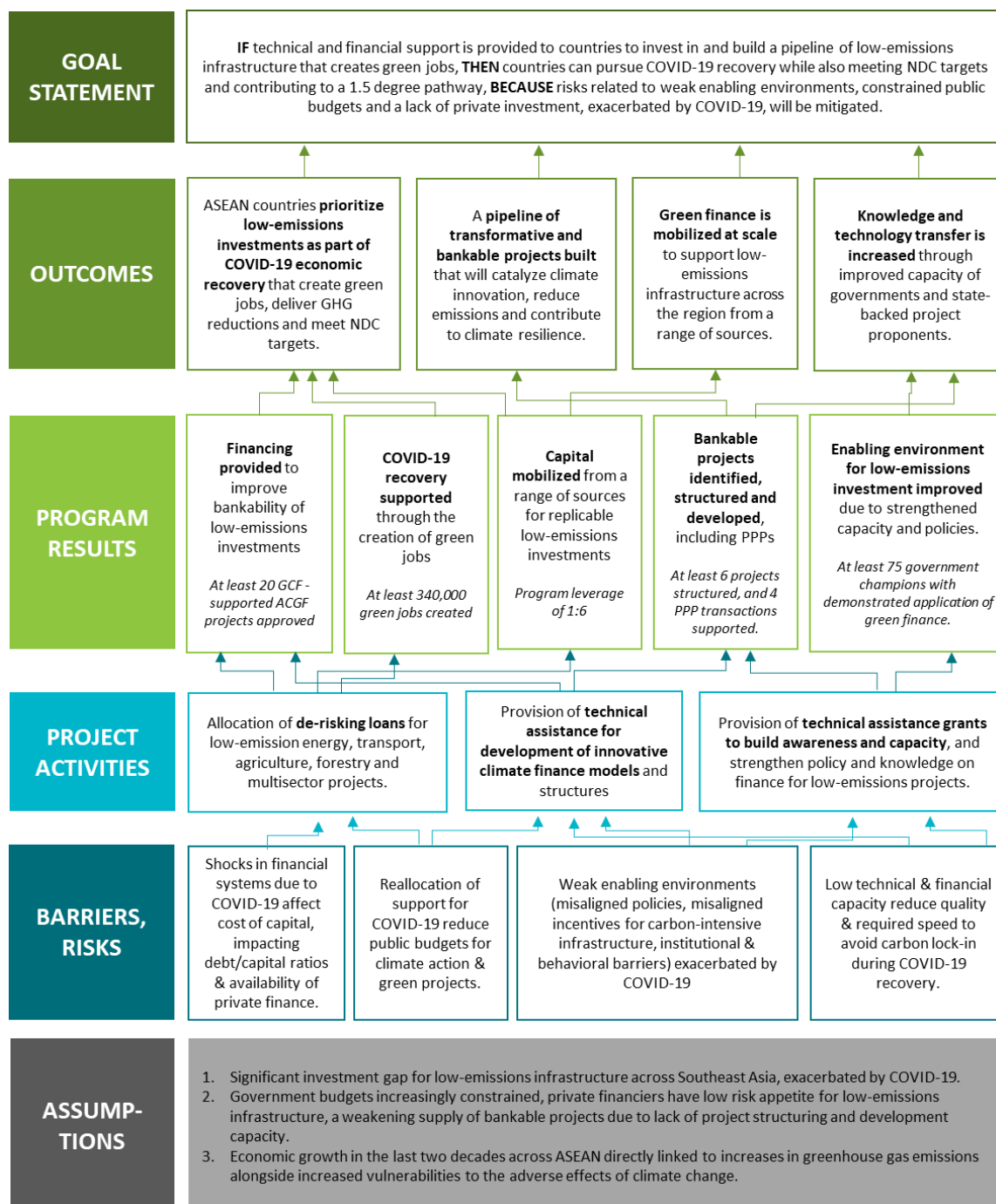
¹⁷ Ibid.

¹⁸ Managed by ADB under its Urban Financing Partnership Facility, the Trust Fund supports integration of digital solutions into urban projects. <https://www.adb.org/site/funds/funds/asean-australia-smart-cities-fund>

complement other regional cooperation initiatives more broadly, such as the Greater Mekong Subregion Climate Change and Environmental Sustainability Program (focused on climate policy and environmental management), the USAID Green Invest Asia platform (improving forestry and sustainable agriculture investments), and the Cities Development Initiative for Asia (supporting the structuring of city-level projects).

B.2. Theory of change (max. 1000 words, approximately 2 pages plus diagram)

The **high-level vision of the program** is 'ASEAN countries' post-COVID recovery supports low-emission infrastructure development'. Supporting this, the **goal statement** for the ACGF GRP is: if technical and financial support is provided to countries to invest in and build a pipeline of low-emission infrastructure that creates green jobs during early years of post-COVID recovery (2021 onwards), then countries will pursue COVID-19 recovery while meeting NDC targets and contributing to a 1.5 degree pathway. This will happen only because the ACGF GRP specifically targets and mitigates risks related to weak enabling environments, constrained public budgets and a lack of private investment, which have been exacerbated by COVID-19.



The **theory of change** for the program is as follows:

Assumptions:

- *Given:* the diversion of budgets towards public health and economic stimulus packages due to COVID-19 and a significant investment gap for sustainable infrastructure in Southeast Asia;
- *And that:* private financiers risk appetite for low-emission infrastructure in Southeast Asia is at an all-time low due to economic recession, and there is a weakening supply of bankable green projects due to weak project structuring and development capacity in both the governments and in the private sector;
- *And that:* economic growth in most ASEAN countries in the past two decades is directly linked to an increase in GHG emissions while at the same time vulnerabilities to the adverse effects of climate change have also increased;

Risks and barriers:

- *And considering that:* shocks in the financial systems due to COVID-19 jeopardize stability and affect cost of capital, impacting debt/capital ratios; diversion of public budgets reduces funds available for NDC implementation; the regulatory framework is not aligned with low-carbon trajectories; behavioral barriers affect awareness and mindsets to prioritize green business models; low technical capacity and skills may reduce quality of action.

Inputs / activities:

- *Then it follows that:* financing needs to be targeted towards reversing the current trend towards an emissions-intensive recovery from COVID-19, through:
 - Loan-based de-risking of investments to enhance bankability and leverage resources in renewable energy and energy efficiency, low-carbon transport, low-emission forestry and sustainable agriculture, and green sustainable urban environments.
 - Grant-based technical assistance and advisory support for building innovative financial structures and models for low-emission investments with the aim of building a pipeline of 'finance-ready' sub-projects and linking these to capital markets. This is achieved through a) support for developing and integrating innovative green recovery instruments and models b) developing hybrid low-carbon PPP structures and c) supporting the scale-up of climate bonds to mobilize capital for low-emission projects.
 - Grant-based technical assistance to strengthen the enabling environment for low-emission infrastructure through building knowledge and capacity, especially at local government level, and support for policy reform, through a) support for formulation of green recovery strategies, including roadmaps for the issuance of climate bonds b) engagement with investors c) enabling 'Champions' for green finance and d) supporting capacity building to strengthen project implementation.
- *This is accomplished:* through a revolving facility that is programmatic and regional in nature, deploys a mix of grant resources and loans, and de-risks climate-positive investments to mobilize further investment through additional financiers, including ADB and ASEAN countries, rapidly and at scale;

Outcomes:

- *In order to achieve:*
 - Prioritization of low-emission investments that result in **significant GHG emission reduction and the creation of green jobs** during the COVID-19 recovery period which support target countries in their implementation of activities aligned with the Paris Agreement;
 - Building a **pipeline of transformative and bankable projects** that will catalyze climate innovation and contribute to the decoupling of economic growth from carbonization in the region;
 - Facilitation of the **flow of green finance** from a range of sources to low-emission infrastructure that supports the mobilization of funds at scale;
 - Increased **knowledge and technological transfer** through the strengthening of capacity of governments and state-owned enterprises to structure and develop sound projects.

Paradigm shift:

- Which will result in the following paradigm shift that: ASEAN countries mainstream low-emission actions into COVID-19 recovery pathways as a result of a stronger enabling framework, innovative technologies and multi-instrument financing, which catalyzes investment from public, private and commercial sources, creating significant leverage, scalability and replicability.

B.3. Project/programme description (max. 2000 words, approximately 4 pages)

OVERVIEW

The ASEAN Catalytic Green Finance Facility Green Recovery Program (ACGF GRP) is designed as a comprehensive, country-owned, multi-instrument platform to support countries' transition to a low-emission COVID-19 recovery path. The program will support developing ASEAN countries to refocus on the implementation of their green finance pathways within the context of COVID-19 recovery, strengthening alignment with the Paris Agreement and providing the foundation for more ambitious NDCs.

ACGF GRP will be managed by ADB, and associated with ACGF, a facility of the ASEAN Infrastructure Fund (AIF) that is owned by ASEAN countries and ADB. ACGF GRPs' association with AIF, the only country-owned, regional infrastructure financing initiative of its kind, demonstrates its backing by finance ministries in the region.

Design principles - programmatic, catalytic, maximizing climate impact

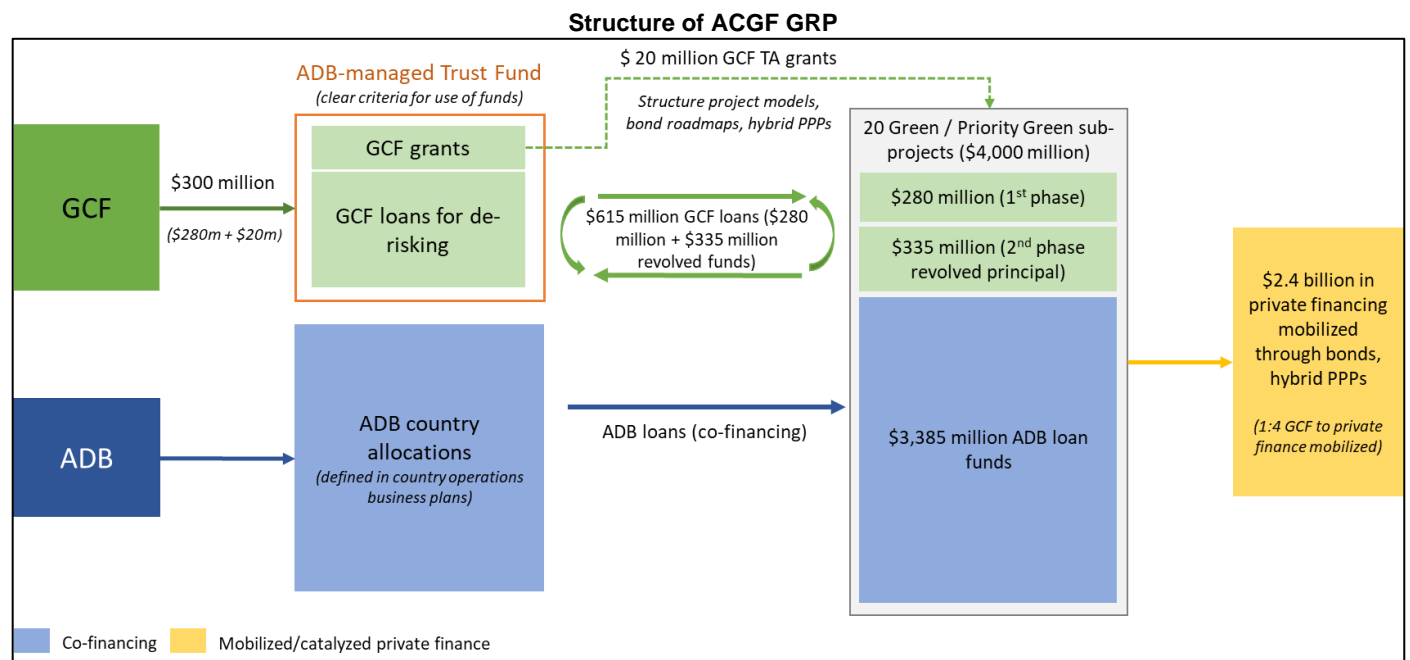
The ACGF GRP will help targeted ASEAN developing member countries to prioritize post-COVID infrastructure investments that have high climate-positive / green impacts, are bankable and that mobilize private capital. The key design features are as follows:

- Programmatic response, which (when compared to project-by-project financing) is critical to rapidly finance post-COVID climate projects at the scale needed and capitalize on the window of opportunity posed by COVID-19 recovery stimulus packages. The program enables the development of a portfolio of sub-projects with common criteria and themes, as well as efficiency in financing administration, while maintaining relevant safeguards.
- Clear focus on transformational, high-potential climate and green sub-projects, by integrating portfolio climate performance targets, promoting sub-projects that meet global best practice performance thresholds on emissions reductions, and creating performance incentives by linking a higher share of financing for sub-projects with higher impact potential, as measured by climate indicators.
- Combined structuring and financing, which helps to identify low-carbon sub-projects, proactively structure innovative technical and financial models to maximize their CO₂ mitigation potential early in the project cycle and provide catalytic financing for these to improve their bankability. This combined support addresses structural gaps across the infrastructure life cycle to create multiple low-carbon projects.
- Emphasis on bankability, blended and leveraged finance, using innovative approaches (with more innovative products introduced over time) for creating bankable financial models over a project's lifecycle, and by capitalizing on ACGF's pool of existing capital and financing partnerships with other development partners, to mobilize private capital from commercial banks, investors and PPPs.
- Emphasis on partnerships with National Development Banks and GCF DAEs, through proactive engagement with PT SMI, Development Bank of Philippines, Land Bank Philippines, Cambodia Rural Development Bank and other state-backed financing institutions to originate concepts for ACGF GRP sub-projects.
- Providing financing responsive to country context in the face of COVID-19 economic downturn, by linking pricing to country socio-economic context (as measured by GDP per capita at purchasing-power-parity levels), providing longer grace periods to address expected depressed project revenues in the medium-term future.

Structure

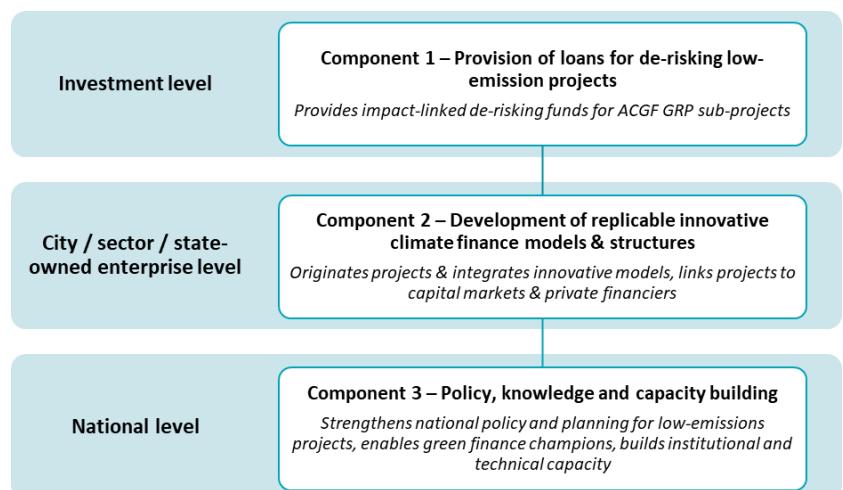
Through the ACGF GRP, GCF financing of USD 300 million (USD280 million loans + USD20 million technical assistance grants) will be used in a revolving structure with principal repayments from the first investment phase supporting subsequent investments. Overall, through this revolving structure, USD 635 million of GCF funds (USD 300 million GCF contribution + USD 335 million revolved GCF loans) will leverage over USD 3.3 billion in ADB financing to support 20 low-emission sub-projects with total costs of USD 4 billion. At a sub-project level, ADB will be responsible for mobilizing co-financing for ACGF GRP funded project of up to USD 3.3 billion from its own funds through country program allocations, and / or from other development partners, as required and appropriate for the sub-project.

The revolving structure will a) facilitate maximizing the catalytic effect of GCF financing to support a substantial pipeline over a 30-year lifespan b) progressively support higher-performing low-emission sub-projects over time, commensurate with increasing climate ambition over time c) progressively utilize more sophisticated innovative structures more widely over time.



Components

Unlocking finance flows at scale into a pipeline of low-emission sub-projects is a critical need for the region to have a meaningful post-COVID green recovery. ACGF GRP therefore proposes **three complementary components** targeting project-level city/sector level and national level challenges to the flow of capital. Component 1 focuses on financing priority green sub-projects, and Components 2 and 3 aim to use technical assistance grants in creating the access to finance, policy, knowledge and capacity enablers that will a) ensure the scaling up of capital flows b) ensure projects are implemented well to deliver the projected climate and other impacts.



COMPONENT 1: PROVISION OF LOANS FOR DE-RISKING LOW-EMISSION PROJECTS

GCF loans will complement ADB financing, and financing from AIF and other development partners (as appropriate), to de-risk funds to improve the bankability of low-emission infrastructure projects.

Sector focus

The priority focus areas for the program have been identified by an analysis of the climate change baselines in the region and an assessment of sectors where financing mechanisms can have most impact. The use of energy (electricity production, transport, industry and buildings) and land-use change (forestry and agriculture sectors) are responsible for the majority of the region's emissions¹⁹. Commensurate with this, the priority sectors for investment in the region are as follows, with every sub-project meeting project-level criteria and performance thresholds (as applicable) for GHG reductions and environmental sustainability:

Table 1: Sectors and sub-sectors included in the program

SECTOR	TYPES OF SUB-PROJECT INTERVENTIONS ^{ab}
RENEWABLE ENERGY & ENERGY EFFICIENCY	<ul style="list-style-type: none"> Renewable energy systems Energy efficiency in industry and buildings Energy efficiency in transport Energy efficiency in agriculture sectors Energy storage and transmission to support increased renewable integration into the grid
LOW-CARBON TRANSPORT	<ul style="list-style-type: none"> Public transport systems: light rail, metro rail, bus rapid transit Modal shift and inter-urban railway development Active transport systems (including cycling and walking) Electric vehicle infrastructure
SUSTAINABLE AGRICULTURE AND NATURAL RESOURCES	<ul style="list-style-type: none"> Reforestation and mangrove management Agro-forestry projects that promote restoration Energy efficiency / reduce energy consumption / carbon intensity of agriculture and fisheries Integration of renewable energy in agriculture and fisheries Carbon sequestration (contribute to increasing the carbon stock in the soil or avoiding soil carbon loss) Reducing non-CO₂ emissions from livestock management
URBAN AND MULTISECTOR	<ul style="list-style-type: none"> Brownfield energy efficiency improvement in water & wastewater systems and low-carbon / energy efficient greenfield water & wastewater systems Renewable energy in water supply and waste-water systems Waste management: Separate collection and transport of source-segregated waste streams, material recovery from waste stream, waste-to-energy from mixed residual municipal waste or similar

^a This list is consistent with the Joint MDBs-IDFC Common Principles for Climate Mitigation Finance Tracking taxonomy of eligible sectors

^b All sub-projects must meet project-level eligibility criteria (see below) and performance thresholds (as applicable) for GHG reductions and environmental sustainability.

Portfolio-level performance targets and metrics

The following program-level targets will guide the allocation of investments:

- (i) GHG reduction: sub-projects approved with the potential to reduce 119 million tonnes CO₂ (lifetime emissions)
- (ii) Performance: 45% of sub-projects over time will classify as 'Priority Green', meeting global best practice thresholds for GHG reductions
- (iii) Green jobs: 340,000 green jobs created by ACGF GRP sub-projects
- (iv) Gender and social inclusion: 80% of sub-projects will directly advance gender and social inclusion

¹⁹ Energy-related emissions from fossil-fuel combustion make up just under 40% of the region's emissions (1.3 billion tonnes CO₂ in 2016), and within this, 46% comes from electricity production, 26% from transport and the remainder from industry and buildings. Land-use change emissions make up an additional 40% of the region's emissions. See Annex 2B.

(v) Leverage: Ratio of GCF funds to other funds (1:6)

Project-level eligibility criteria and requirements

All ACGF GRP sub-projects must meet the following eligibility criteria, based on indicators and thresholds set out in the ACGF Investment Principles and Eligibility Criteria (see below and Annex 23):

- (i) Countries: ADB development member countries in the Southeast Asia region i.e. Cambodia, Indonesia, Lao PDR, Malaysia, and Philippines.
- (ii) Borrowing entities: sovereign or sovereign-guaranteed entities (e.g. government owned entities, special purpose vehicles (SPVs) or state-owned enterprises PP concessionaire SPVs, etc.)
- (iii) ACGF GRP financing: no more than 15% or USD 25 million for a 'Green project' or 25% or USD 40 million for a 'Priority Green project', with the maximum allocation per sub-project limited to USD 50 million per sub-project.
- (iv) Co-financing: confirmed co-financing for total sub-project costs, including at least 30% co-financing from ADB own funds²⁰, with the remaining co-financing from ADB own funds, AIF/ACGF and other financing sources, as relevant and appropriate for the sub-project.
- (v) Climate additionality / impact: Classification as a 'Green' or 'Priority Green' project according to ACGF Investment Principles and Eligibility Criteria, with every project a) meeting a minimum threshold for climate finance b) demonstrating a reduction in GHG emissions against a baseline or meeting global best practice performance thresholds (for Priority Green projects) and c) demonstrating a contribution to another environmental objective.
- (vi) Bankability: Potential for support to improve financial viability / sustainability & bankability as a result of ACGF GRP support, with each project assessed for an average loan life debt service coverage ratio, greater than 1.05 and a positive net present value calculated over the subproject's lifecycle;
- (vii) Private capital catalyzation: Potential to catalyze resources from private, commercial or institutional sources, of at least 10% (of estimated capital expenditure at the outset) at any time over the first 8 years, as part of capital expenditure or operations and maintenance.
- (viii) Green jobs: Potential to create direct and indirect green jobs in support of COVID-19 economic recovery

In addition, the following requirements will apply to all sub-projects:

- (ix) Safeguards: Compliance with ADB's safeguards policies as outlined in the ACGF GRP environmental and social management framework (see Annex 6).
- (x) Risk Assessment: Each qualified project would be screened per ADB's standard operational and due diligence guidelines including for legal, financial and integrity risks (see Section F).

A stepwise approach will be followed to **establish climate performance and additionality** through the application of the ACGF Investment Principles and Eligibility Criteria (see Table 2):

- Screening of eligible 'climate change mitigation' activities against a detailed taxonomy embedded in established climate finance tracking systems within ADB. ADB systems build on Joint MDBs-IDFC Common Principles for Climate Mitigation Finance Tracking, including the taxonomy of eligible sectors, which outlines which activities (under a project) can be classified as climate change mitigation activities. This taxonomy is updated by the joint MDBs group to take account of changes to technologies and investments, and the latest update also integrates criteria for Paris Alignment. Annex 23 and additional documents provide more information on these.
- Selection of 'high climate impact' sub-projects using climate finance thresholds. As the ACGF GRP considers projects across a range of development sectors, climate finance thresholds (60% for a green

²⁰ ADB will mobilize all co-financing needs for sub-project to ensure the project reaches financial close, demonstrated by standard ADB formal documentation. These needs will either be fulfilled by ADB's own resources, or if feasible and required by the sub-project, by ASEAN Infrastructure Fund / ACGF and other partner financial institutions will be sought. In all cases, a minimum of 30% of ADB co-financing will be required for every sub-project.

project and 90% for a priority green project)²¹ are used to select sub-projects that address mitigation as a “core” goal (vis-à-vis a co-benefit). Climate finance is assessed for all ADB projects during project preparation, based on a rigorous and detailed climate change assessment which outlines and justifies which components classify as climate finance or not. These assessments are conducted by project teams and reviewed by experts in ADB’s Sustainable Development and Climate Change department.

- **Assessment of potential climate impact.** Potential GHG reductions from sub-projects are then assessed, building on ex-ante estimates prepared during sub-project preparation. Priority Green sub-projects are expected to represent best practice in their sub-sector by meeting any one of the following: a) achieving international best practice thresholds (e.g. EU Sustainable Finance Taxonomy or Climate Bond Initiative criteria – see Table 3), b) demonstrating a 10% improvement in performance against other similar low-emission projects, or c) demonstrating a clear alignment with a 1.5 degree pathway. Project-level GHG assessments follow methodologies established in the joint IFI working groups on GHG emissions tracking, as well as existing ADB guidelines.
- **Assessment of potential ‘other green’ impact.** Broader environmental additionality of sub-projects is established through assessment against additional green indicators, with all sub-projects expected to demonstrate contributions to improved land, air or water quality; enhanced resource efficiency of or sustainable management or protection of natural resources, ecosystems or biodiversity.

Table 2: ACGF Criteria for Green and Priority Green infrastructure

	Green projects	Priority Green projects
Definition	Must show (i) a demonstrable contribution to climate change mitigation, and (ii) a contribution to environmental sustainability. One of the primary objectives of the project must be to reduce GHG emissions.	
Climate change mitigation criteria	Eligible investments would qualify as climate change mitigation finance as per the Joint MDBs-IDFC Common Principles for Climate Mitigation Finance Tracking ^a They should: (i) be included in the list of eligible categories and/or activities (in the Common Principles), (ii) demonstrate a reduction in GHG emissions against a baseline scenario, and (iii) at least 60% of the total project cost should qualify as climate finance ^b	Additional screening criteria: (i) At least 90% of the total project cost should qualify as climate finance ^b And any one of the following: (ii) alignment with a long-term low-emission pathway in the country (iii) an improvement in performance compared with other similar investments in the country or region (e.g. 10% additional reduction in GHG emissions vs. other similar projects), or (iv) meet international best practice thresholds for similar investments (e.g. as given in the EU Sustainable Finance Taxonomy or other)
Environmental sustainability criteria	Demonstrate a quantitative (through the use of relevant, project-specific indicators) or qualitative assessment of contribution toward an (i) improvement of air quality, (ii) improvement of water quality, (iii) promotion of healthy ecosystems and biodiversity, or (iv) promotion of more efficient use of resources.	

^a MDBs and IDFC. 2015. *Common Principles for Climate Mitigation Finance Tracking*. Version 2. 15 June. https://www.eib.org/attachments/documents/mdb_idfc_mitigation_common_principles_en.pdf.

^b This is to ensure priority is given to efforts to promote investments where the principal aim is reducing emissions.

Table 3: Non-exhaustive selection of Best Practice Thresholds

Category	Activity	Potential thresholds	
		EU Sustainable Finance Taxonomy	CBI Climate Bond Taxonomy
Renewable Energy	All renewable energy technologies (in general)	Net GHG reductions	No threshold
	Geothermal	Direct emissions less than 100 g CO ₂ e/kWh (life cycle emissions)	Direct emissions less than 100 g CO ₂ /kWh
	Hydropower	Direct emissions less than 100 g CO ₂ e/kWh (life cycle emissions)	Direct emissions less than 100gCO ₂ /kWh
Lower-carbon and efficient	Transmission and distribution systems	Direct connection of low carbon electricity generation below the threshold of 100 g CO ₂ e/kWh, measured on LCE basis	Infrastructure supports the integration of renewable energy or energy efficiency systems and their load-balancing

²¹ The use of climate finance thresholds is unique to the ACGF approach. The thresholds (60% for a green project and 90% for a priority green project) are based on an assessment of historical ADB projects in Southeast Asia, and typical climate finance shares per project.

energy generation			
Energy efficiency	Energy efficiency improvements in existing commercial, public and residential buildings	At least 30% reduction in emissions compared to the baseline performance of the building before the renovation	A substantial reduction in g CO ₂ /m ² because of upgrade or retrofit
	Vehicle energy efficiency in passenger vehicles	Direct emissions are below 50 g CO ₂ e/p-k	Vehicle meets universal g CO ₂ /p-km threshold based on International Energy Agency Mobility Model data
	Vehicle energy efficiency in freight vehicles	Low-emission heavy-duty vehicles with specific direct CO ₂ emissions of less than 50% of the reference CO ₂ emissions of all vehicles in the same sub-group are eligible.	Vehicle meets universal g CO ₂ /p-km threshold based on International Energy Agency Mobility Model data
Transport	Urban transport modal change	No threshold for “zero direct emissions” activities (e.g., light rail transit, metro, tram, trolleybus, bus, and rail). Direct emissions are below 50 g CO ₂ e/p-km	Public walking and cycling, Bus rapid transit systems – no threshold
	Railways (passenger)	Direct emissions are below 50 g CO ₂ e/p-km	Passenger transport system meets universal g CO ₂ /p-km threshold
	Railways (freight)	Emissions (g CO ₂ /t-km) are 50% lower than average reference CO ₂ emissions of heavy duty vehicles.	Transport meets universal g CO ₂ /t-km threshold
Sustainable agriculture and natural resources	Reforestation and mangrove management	Demonstrate maintenance and/or increase of carbon sinks + compliance with SFM practices disclosed every 5 years & independently verified + no conversion of natural land after 2008	Demonstrated sequestration potential + FSC/ PEFC certification / established management plan + Free Informed Prior Consent standards (e.g. ILO, FSC, FAO etc.)
	Sustainable forest management	Demonstrate maintenance and/or increase of carbon sinks + compliance with SFM practices disclosed every 5 years & independently verified + no conversion of natural land after 2008 + regenerate harvested forests	No natural land conversion after 2010 + FSC / PEFC certification + meeting Free Informed Prior Consent standards (e.g. ILO, FSC, FAO etc.)
	Reduce energy consumption / carbon intensity of agriculture and fisheries	Reduction in GHG emissions over specified period (i.e. 2020-2030: 20%; 2020-2040: 30%; 2020-2050: 40%) / essential management practices in place + above and below ground carbon stocks to be increased over 20-year period + no conversion of high carbon stock ad after 2008.	No conversion of high carbon stocks land + no clearing of woody vegetation over 3m in height + meet climate-aligned GHG emission reduction over investment period (i.e. 24% by 2030, 36% by 204, 47% by 2050)

CBI = Climate Bonds Initiative, CO₂e = carbon dioxide equivalent, g = gram, GHG = greenhouse gas, kWh = kilowatt-hour, LCE = Life-cycle emissions, m² = square meter, p-km = passenger per kilometer, t-km = ton-kilometer.

Note: this table serves as an illustration of thresholds available and is not an exhaustive list of all the thresholds available in the EU Taxonomy on Sustainable Finance and the Climate Bond Taxonomy.

Financing approach and terms

The program will support loans to low-emission projects that will enable these to cross a predefined bankability threshold to attract private sector and commercial funds in the long term.

The proposed funding terms offered by the program consider the following issues:

- Climate performance, with a higher quantum and proportion (per project) of GCF funds for sub-projects that meet global best practice thresholds for emissions reductions (classified as Priority Green), thereby supporting their development and implementation over time.
- Balancing minimum concessionality and delivering climate benefit through the use of loans (rather than grants), with clear competitive advantage of the pricing of GCF funds relative to other external public

sources, to incentivize governments to re-prioritize the financing of low-emission projects during COVID-19 recovery

- Country socio-economic context, with lower pricing for ADB-concessional lending countries (i.e. Cambodia and Lao PDR), where mobilizing commercial funds for green infrastructure projects can be more challenging.
- COVID-recovery context: Longer loan grace periods are included to reflect a post-COVID recovery period with delayed construction (in 2021/2022) and depressed revenues from projects in initial years.

The proposed terms for GCF financing are as follows:

Table 4: Proposed lending terms for GCF funds in the ACGF Green Recovery Program

Countries	Currency	Interest rate (fixed) ⁱ	Tenor (years) ⁱⁱ	Grace period (years) ⁱⁱⁱ	Principal repayment period (years)	Fund usage limits ^{iv}	
						Green projects	Priority Green projects
Cambodia and Lao PDR	USD	0%	15	8	7	USD25 million or 15% of overall project cost	USD40 million or 25% of overall project cost
Indonesia, Philippines	USD	0.50%	15	7	8		
Malaysia	USD	1.00%	15	6	9		

ⁱ This is the pricing offered to borrower governments. It includes GCF service fees as follows: for Cambodia and Lao PDR, no service fees during the first phase of investments, while a 0.25% service fee will be charged for sub-projects in the second; for Indonesia and Philippines, 0.25% service fees; for Malaysia 0.25% services fees during the first phase of investments, while a 0.50% service fee will be charged for sub-projects in the second phase.

ⁱⁱ Commitment charge of 25 basis points would apply on undisbursed loan amounts.

ⁱⁱⁱ During the grace period, interest payments would be made but not principal repayment.

^{iv} Portfolio level funding cap: in line with prudential norms, financial support from GCF funds will be capped at USD 50 million per sub-project

The pricing proposed is based on extensive discussions with ASEAN governments during the ongoing implementation of the ACGF pilot phase in 2019-2020, and takes into account the following issues: a) Considering increasing fiscal deficit concerns, governments are looking to limit sovereign guarantees to all but the most competitive sources of finance which can demonstrate development impact and leverage / crowding of other sources; b) Limited revenue models in projects, especially resulting from the COVID-19 crisis, require competitively priced funds²² especially if attempting to usher in untested or new technologies which are required to promote a transformational shift for a sector; c) Funds need to be more competitive than local currency funds available domestically in many countries (e.g. Indonesia, Philippines, Malaysia etc.) in order to incentivize the scaling up of low-carbon alternatives²³.

The pricing offered is competitive for sovereign operations and compares well with the rates offered by similar development and multilateral institutions active in Asia. The interest rates that are being proposed strike the right balance between ensuring the viability of the project and the implementation of the climate actions that are proposed. They also strike the right balance between the incentives that are offered and the ability to attract (i.e. crowding in rather than crowding out) further private sector investments. These parameters have driven the basis of the calculation to apply the appropriate pricing while maintaining minimum concessionality.

Funding instruments and use of funds

Funds will be provided, alongside ADB sovereign loans, to borrower governments, for financing specific sub-projects, either directly or through a financial intermediary. In either case, provision of funds will be to sub-projects that comply with the eligibility criteria and conditionalities given here.

²² E.g. interest rate for ADB's Ordinary capital resources (OCR) loans which do not necessarily promote low-emission investments are as follows: Philippines and Indonesia would be around 1.6%, based on a 15-year fixed LIBOR rate of 1.1% + 50bps spread. For Cambodia or Lao PDR, ADB's loans to concessional lending countries are priced at 1% during the grace period and 1.5% during the amortization period. See <https://www.adb.org/what-we-do/public-sector-financing/lending-policies-rates>.

²³ For example, sovereign loans in USD or EUR are subject to a) fees by the government (e.g. sovereign guarantee fee) and b) currency exchange fees, with currency swaps only available for short periods such 5 years or 10 years (depending on the country). This means that the final pricing (of sovereign loans) to the projects in local currency is often significantly higher (5%-7%), and in cases, at par with sovereign bond yields or even market priced commercial funds.

The most likely use of funds will be to cover capital costs of a project to improve the financing cost (i.e. weighted average cost of capital), however, over time, new products and models will also be explored to meet the needs of sub-projects.

- **Debt products:** In the first phase of investments, 100% of GCF funds would be lent to Green and Priority Green sub-projects to finance capital expenses, in the form of senior debt
- **Completion guarantees / convertible debt:** In the second phase of investment, GCF funds would still be lent to sovereign governments or against sovereign guarantees, but based on the specific project's requirements, these funds could be used in sub-projects to support government entities to provide completion guarantees (wherein when a guarantee is called, it is a debt in the project's or the project sponsor's books) or debt products that could be converted to equity prior to exit (with a premium).

Incremental costs supported by GCF will be calibrated to cover the additional costs of actions needed to implement low-carbon infrastructure in the target countries, from the established baseline (which is country specific). Where justified, GCF financing will cover for the higher cost of investing in transformative climate mitigation technologies; to tackle existing externalities, barriers and risks of investing in green infrastructure, thus raising the level of the ambition in this program.

Priority investments and project pipeline

The indicative sub-project pipeline for the program is given in in Table 5, drawn from firm and expected projects in ADB's country operations business plans and pipelines. For the first investment phase (2021 to 2027), four sub-projects have been initially identified, with a likely larger demand for funds beyond these, considering ADB's lending pipeline to the countries in the proposal is around 3-4 billion per year. The identified projects include 2 'shovel-ready' projects (i.e. those where feasibility studies have been completed or are close to completion) with high likelihood of being financed by the program in 2021. Beyond this, an additional 2 project concepts have been identified (included in ADB's country pipelines), which could also qualify for support from the program in 2022 and 2023, subject to the completion of feasibility studies and full screening against eligibility criteria. A larger projects pipeline for the program is currently being built for 2022 and 2023, and may possibly include urban and inter-urban railway projects in Indonesia and Philippines, a renewable energy project in Indonesia, and a water resources efficiency / management project in Cambodia.

Note, several sub-projects shown here risk being delayed due to COVID-19 or not prioritized as part of COVID recovery, and GCF support through the ACGF GRP will be important to ensure these projects are financed and implemented as planned. 2022 and 2023 sub-projects, especially, will also benefit from technical assistance to improve the climate impact potential early in the project cycle, starting in 2021. Annex 2 includes project reports (for the firm sub-projects), and project concepts (for the long-list sub-projects).

Table 5: 'Firm' sub-projects with a high likelihood of financing in 2021 / early 2022

Project	Readiness & status
SDG Indonesia One Green Finance Facility <i>(Total project cost: 150 USD million)</i> This project aggregates and will finance a pipeline of pre-identified small-scale subnational and city climate change mitigation projects including micro-hydro, waste-to-energy, and electric vehicles, mobilizing significant private capital. The Facility is focused on 'shovel' ready sub-projects (as outlined in the project documentation in Annex 2A1) that will allow for a swift and effective disbursement of funds to the end beneficiary. As part of Indonesia's flagship SDG Indonesia One platform the project will support PT SMI in scaling up their green finance operations and contribute significantly to Indonesia's mitigation targets.	Expected approval: Q2 2021 . Feasibility completed, project documents being prepared for internal approval.
Philippines: Davao Public Transport Modernization Project <i>(Total project cost: 358 USD million)</i> The project will support the City of Davao to invest in a sustainable and modern public transport system, by developing a high priority bus system to replace the use of jeepneys, tricycles and other vehicles. The project will develop the infrastructure for the bus system, strengthen the city's traffic management system, and put in place performance-based models to improve the efficiency of bus operations. The project will improve urban mobility, reduce emissions, incorporate health-related measures (in response to COVID-19), and support replicable models to mobilize private investment for public transport.	Expected approval: Q4 2021 . Feasibility study ongoing (completion delayed due to COVID-19 lockdown).

Table 6: Pipeline sub-projects which may qualify for support in 2022-2023

Project	Total project cost (USD million)	Expected approval
Cambodia: Blue Carbon Project The project will set up a catalytic green financing model to support 'blue' carbon sequestration in four coastal provinces in Cambodia. The project will pilot the model to mobilize financing from banks, micro-finance institutions, food companies and SMEs, for investments in restoration and replanting of 11,770 ha of mangrove forest and improving the energy efficiency of marine and coastal fisheries value chains and infrastructure. The project will also support improved management of coastal and marine ecosystems by local community fisheries entities. The project is expected to result in substantial carbon savings of 1.6 mtCO _{2e} over its lifetime.	125	Q4 2021
Cambodia: Energy Efficiency Sector Development Program The project will support the Government of Cambodia a) draft and enact a portfolio of policies and regulations on energy efficiency, and b) finance projects to improve the energy efficiency, with a possible focus on space cooling in the services sector, residential sector and public lighting. The project will be an important step to unlocking energy efficiency market potential in Cambodia.	80	2022

COMPONENT 2: DEVELOPMENT OF REPLICABLE AND INNOVATIVE CLIMATE FINANCE MODELS AND STRUCTURES

With ASEAN still only a small part of global green finance flows (as evidenced by its small share of global green and sustainable bonds and green debt), in order to ramp up access to green finance, countries – not just at the sovereign level but also at sub-sovereign levels - need to build three financing instruments: a) **green and sustainable bonds** (issued by government entities); b) **hybrid PPP models** for renewable energy and sustainable cities (hybrid denoting greater de-risking models over traditional PPP models); c) **innovative green recovery financing mechanisms** (such as green securitization).

Component 2 will mainstream the above financing instruments at a) **city or municipal government**, b) **state-owned enterprises** (SOEs), and c) **sovereign sectoral ministries** in targeted countries, and help generate a pipeline of investments in the region that demonstrate the potential of innovative financing mechanisms and instruments – such as green bonds and hybrid PPPs - to raise capital at scale. Based on the financing needs of each investment, financing provided under Component 1 will be used to de-risk these investments to realize their GHG reduction potential.

Approaches and methodologies will differ depending on each country and will need to address the common barriers faced by low-emission projects in accessing financing: a lack of well-defined underlying revenue streams, lack of credit worthiness and track record of state-backed project sponsors, high perception of risk by private investors and a lack of prioritization of low-emission alternatives by governments.

Activity 2.1 Scaling up Green and Sustainable Bonds (for sovereigns, cities and SOEs)

There is a major need to scale up green and sustainable bonds from governments, cities and SOEs, across all the countries covered in this proposal. Green bond issuances across ASEAN are increasing but are still only a minor share of global issuances of green bonds (3% of global green bonds issuances in 2019). Within the region, issuances have been led by Singapore and Indonesia, with less activity seen in other countries. So far, few issuances have come from governments and sovereign-backed entities, and only two issuances have been at the municipal level. To this end, ACGF GRP will aim to support the development of roadmaps for the issuance of **at least 4 green and/or sustainable bonds** (including project bonds where possible), helping to mobilize access to capital market resources for sponsors and projects supported under Component 1.

Investor and Country Appetite Prioritization: An origination and prioritization effort will be undertaken rapidly with all countries in the proposal to identify an initial shortlist of city, sovereign, and SOE entities to support in

development of bond roadmaps. This prioritization will link to and support sub-sectors, cities and SOEs targeted to receive financing under Component 1. Key factors will include credit ratings or shadow credit ratings, financial positions, underlying green-eligibility of projects to be financed, local regulations, credit enhancement potential and investor interest in sector or country. This effort will build on work already commenced by the ACGF team in its work in supporting bonds issuance in Thailand in 2020, as well as on the work done by ASEAN governments, ADB and other partners (such as the ASEAN International Capital Markets Forum, Climate Bonds Initiative and Asia Sustainable Finance Initiative (ASFI) to develop green bonds.

Sub-activity 2.1.1 Policy Enablers Roadmap Development (Early stage countries)

At least **2 green bond enabler roadmaps** will be developed for prioritized countries, city governments or sectoral ministries which focus on the key policy, institutions, capital markets, or other country or sector level enablers needed to scale up the process of bond issuance and mitigate existing constraints. This is anticipated to be needed for countries at an earlier stage of green capital markets development (e.g. Cambodia and Lao PDR). This work will link to and focus on sub-sectors, cities and SOEs targeted to receive financing under Component 1.

Such roadmaps will include proposed a) locally relevant and implementable green finance frameworks including taxonomies, b) green bond standards or principles to be adopted, c) mapping of potential green bond opportunities (potential issuers or projects), d) policy and regulatory inputs for meeting existing gaps, e) credit enhancement funds or functions to be set up by governments to enable bond issuance, f) knowledge and capacity development proposals for various stakeholders (e.g. securities and exchange commissions, stock exchanges, cities and SOEs), g) credit rating program to be implemented for priority government entities.

Regulators and potential issuers will also be supported to develop green frameworks and standards to ensure transparency around use of proceeds from potential bond issuances. Support will also be provided for 'second opinion' studies by independent third-party providers (e.g. CICERO) to validate these frameworks, which is important to ensure confidence from potential investors. As needed, workshops and training events will be held to build awareness and capacity among regulators, cities and SOEs.

Sub-activity 2.1.2 Bond Issuance Roadmaps (Transaction-specific for Advanced Countries)

Support will be provided to develop roadmaps for **at least 2 green bond transactions** in countries with more developed green finance ecosystems (e.g. Indonesia, Malaysia, and Philippines), targeted at potential bond issuers whether sectoral ministries, city governments or SOEs. This work will link to and focus on sub-sectors, cities and SOEs targeted to receive financing under Component 1.

The roadmaps to be developed will be issuer specific and will include a) development of likely green bond size and term sheet, b) identification of underlying green projects for funding from bond proceeds, c) assessment and recommendations on entity or project's business model and revenue streams, d) due diligence findings and recommendations on financial management and other systems relevant to credit ratings agencies, e) development of bond specific green frameworks to be applied to verify use of proceeds, f) support to local ratings agencies to assign a credit rating, g) support to structure and market the potential bond to investors, and h) verify green bonds frameworks through 'second opinions' by third-party providers. As needed, targeted trainings will be held to build capacity among staff in municipal governments and SOEs to prepare for green bond issuances.

Activity 2.2 Innovative Green Finance Recovery Mechanisms (for low-emission projects)

Support will be provided to develop and pilot innovative green financing mechanisms for low-emission projects that help to leverage public finance (through support provided in Component 1) and mobilize private finance.

Sub-activity 2.2.1 Rapid assessment studies to embed green recovery financing

The aim of this exercise is to embed cutting-edge financing strategies in potential ACGF GRP sub-projects which can reduce government funding and leverage in a high multiple of private capital funds into high-impact climate interventions or projects. This is a different approach to public-private partnership (PPP) structures where

strategic management of a project passes to the private sector, and instead focuses on how government owned projects might be able to attract capital from various sources, which would allow for rapid ramping up across a sector.

An initial origination exercise (with knowledge sharing on innovative mechanisms and models) will be undertaken to identify a short list of entities and projects (at city government, SOEs, sector ministries) where innovative green finance mechanisms can be developed. Initial assessments suggest Indonesia, Malaysia, and Philippines would be the likely countries for such mechanisms.

Rapid assessment studies will be conducted for **at least 7 projects** to assess the potential to embed green securitization, blended finance and other green recovery financing mechanisms into projects. These will identify a) types of private, institutional and commercial financiers that could be engaged within the project structure, b) innovative financing models that could be structured to mobilize private capital, c) required credit enhancement support from national and subnational governments, d) further groundwork needed to pilot a potential financing approach.

This assistance will target potential ACGF GRP sub-projects that a) have a pre-identified government champion or sponsor and b) support transformative climate action as defined in the ACGF Investment Principles & Eligibility Criteria. Project or project concepts will be selected through a multi-pronged engagement approach targeting a) governments, cities and SOEs b) ADB sector and country teams and c) existing ACGF knowledge and financing development partners (e.g. AFD, KfW, EIB, GGGI etc.). NDAs will also be consulted, and potential projects from GCF country programs could also be considered for support.

Sub-activity 2.2.2 Structuring 'finance-ready' projects in difficult markets / sub-sectors

In addition to rapid studies for projects at an early stage of development, further support will be provided to **structure at least 4 'finance-ready' low-emission ACGF GRP sub-projects**. This support will specifically target projects in sub-sectors and markets where mobilization of private climate finance is less in evidence (e.g. low-emission agriculture, reforestation and sustainable forest management, energy efficiency in cities, waste management etc.). In such projects traditional PPP approaches will **not** work (low revenues, high risks, government to retain strategic interest), hence necessitating innovative finance models.

Activities will include a) upstream support to validate the underlying business model and climate case b) development of financing products to address barriers and incentivize climate impact; c) analysis of baselines, and ex-ante assessment of climate impacts of projects; d) development of project level targets and performance measures, and project-specific green frameworks (as relevant); e) financial and technical structuring of projects.

Selection of projects to be supported will be based on the following factors: a) projects must meet ACGF Investment Principles & Eligibility Criteria b) projects must be from a sub-sector or market where there is little evidence of private investment to date c) projects must demonstrate potential demand for financing under Component 1 of the program. Projects could be selected from those supported by rapid assessment studies under the program, or through direct engagement with governments, cities and SOEs. NDAs will also be consulted, and potential projects from GCF country programs could also be considered for support.

Activity 2.3 Scaling up hybrid Public-Private Partnership structures (PPPs) for renewable energy and sustainable cities

Despite efforts to mainstream PPP by ADB and other development agencies, growth of these have been slow across most of Asia, with a further slowing expected due to the economic downturn spurred by COVID-19, resulting in a depression in revenue models and higher risk perceptions. Addressing these challenges calls for hybrid PPP models for city and renewable energy projects which have some potential for developing PPP potential (existing revenue streams) but which are associated with credit or risk perception issues. Hybrid PPP structures essentially require greater risk mitigation by governments, extending not just to capital expenditure (traditional PPPs) but also to some aspect of operations (first loss or revenue guarantees etc.) and climate risks.

Under Activity 2.3, support will be provided to develop **at least 4 hybrid PPP structures for ACGF GRP sub-projects**. This support would be separate to sub-projects supported under Activity 2.2. Building on ADB's

experience in supporting clean energy PPPs, this will specifically target hybrid PPP structures that better leverage public funds to mobilize strategic PPP investments in projects (strategic management by developers plus financing from private capital sources such as commercial banks).

This support will be targeted to the following technologies: wind power, solar power, biomass-based power, waste-to-energy, and battery storage, low-carbon transport, and waste management. Support would cover the whole project cycle: concept, developing a bankable structure, bidding and selection of a private investor. Key activities for each project could include:

- *Conducting project feasibility.* Studies would be carried to conceptualize the project and establish its feasibility including, technical, commercial, legal, regulatory requirements and outcomes, potential climate impact and possible PPP operational and financial model.
- *Preparation of tender documents and marketing.* Preparation of tender documents and market sounding would be carried out to establish the interest of potential participants in the project. This would include risk analysis, commercial, financial and contractual structuring in line with the proposed implementation structure, as well as preparation of various tender and project documentation.
- *Tendering of projects.* A competitive bidding would be carried out to support the government in selection of developer to implement the project. This phase may involve various activities such as carrying out pre-qualification of bidders, responding to bidder queries, assisting with the tender process and evaluating the proposals of bidders.
- *Project Agreement signing.* Assistance in negotiations with the winning bidders, finalizing of project agreements and signing of project agreements.
- *Supporting financial closure.* Assistance will be provided to help in signing of the financing agreements and for project to reach the financial close.

COMPONENT 3: POLICY, KNOWLEDGE AND CAPACITY BUILDING SUPPORT

In addition to building transactions and models, it is equally important to support a) *upstream* awareness and knowledge building across ASEAN governments to build the required awareness and dialogue for upscaling green finance projects into government planning, and b) *downstream* implementation capacity to ensure that innovative projects being developed under ACGF GRP achieve the climate targets set, thereby serving as demonstration projects for replication. Component 3 will support both these aspects as follows:

Activity 3.1 Promoting national Green Finance Recovery strategies

With the aim of building “Green Finance Recovery (post COVID-19) Strategies” for ASEAN governments which will aim at mainstreaming green finance into planning for economic recovery, activities will be undertaken with all ACGF GRP countries as follows:

- *Sub-activity 3.1.1. Knowledge and awareness raising through ASEAN Green Finance Investor Roundtables:* Held annually, these roundtables will be held as a platform to bring together key public sector stakeholders (e.g. finance ministries, regulators, securities and exchange commissions, energy and transport ministries, national development banks) with regional and international institutional investors, asset managers, commercial banks etc. The aim will be to show both demand side green ‘financeable’ projects as well as supply side funds available for a country or sector or for green bonds. This should spur development of larger pipelines of both projects and green bonds as well as provide policy inputs especially from sharing of advanced green finance strategies.
- *Sub-activity 3.1.2. National Green Financing Strategies:* With inputs from the above roundtables, the ACGF team will also undertake dialogues with sovereign governments and larger local governments (e.g. megacities such as Jakarta or Manila or related provincial governments) to identify a phased development of green recovery strategies for highest priority requests. Similar to the work currently underway by the ACGF team in the Philippines (Green Investment Opportunities report) and Thailand (Green Finance Strategies) this should lead to **at least 2 national / local green finance recovery strategy reports** which combine a) recommendations for green financing vehicles (e.g. pooled derisking

facilities) or instruments (green bonds or blue credits), b) possible projects pipeline, c) legislative and regulatory inputs, d) partnership recommendations (e.g. with Luxembourg Green Stock Exchange etc.)

- **Sub-activity 3.1.3. Targeted training through the ACGF 6 Champions program:** training of **at least 75 local government officials** on innovative finance and green principles will be delivered through the ACGF '6 Champions' program. The program will provide a deeper understanding of innovative finance approaches in climate projects and is targeted to mid- to senior-level government officials and project sponsors. The program combines concept presentations with practical hands-on training in the development of innovative finance models for pre-identified climate-positive investments.

Where relevant, analytical and capacity building work under Activity 3.1 will proactively identify opportunities to integrate gender and social inclusion aspects, e.g. through analysis that underpins national strategy development or in the identification of green finance champions to be targeted through the ACGF '6 Champions' program.

Activity 3.2 Ensuring effective projects

Experience from sovereign low-emission projects demonstrate that implementation capacity at city / sector / sub-project sponsor level has a major role to play in ensuring the planned design and impacts of low-emission projects are realized. Without adequate implementation, innovative project structures integrating new high-performing technologies or approaches can fail to reach intended targets, which in turn can cause governments and other stakeholders to reject future projects with similar modalities. Common capacity gaps in cities and SOEs in Southeast Asia include: a lack of capacity and systems to a) implement innovative financing structures which may be new to the context of application, b) monitor and verify climate impacts during project implementation, and c) effectively apply international gender, environment, and social safeguards standards, especially in complex projects (i.e. those involving several sectors, or different financing instruments), and in early stages of implementation.

Activity 3.2 will be critical to ensure that sustainable, transformative impacts expected from ACGF GRP sub-projects are delivered as envisioned. ACGF GRP will develop and finance a pipeline of transformational climate projects which are expected to integrate climate technologies and / or innovative financing mechanisms that are new to the country or city context, and which will require adequate capacity to monitor and implement. In addition, gender, social and environmental safeguards requirements under the ACGF-GRP also call for additional capacity (than would otherwise be required for standard ADB projects), especially to identify and proactively support women's employment and inclusion of vulnerable groups into program implementation.

In response, Activity 3.2 will support capacity building on these issues as part of the **initiation and implementation stage (i.e. post financial close) of at least 4 low-emission ACGF GRP sub-projects** receiving financing under Component 1, under one or more of four areas:

- **Sub-activity 3.2.1. Institutional Systems Development (for climate impact monitoring, linking to monitoring of NDCs):** Set up and implementation of monitoring systems to track and verify climate impacts, conducting baseline studies and data collection as needed, and building internal technical capacity on monitoring and verification. Monitoring systems will be aligned with and link to sector and national level monitoring under the NDCs. Such support will be especially important for projects in agriculture or forestry sectors, where baseline assessments require significant resources.
- **Sub-activity 3.2.2. Capacity Development (for integrating low-emission technologies & innovative financing approaches):** Targeted training for project sponsor staff to build skills, capacity and knowledge on applying low-carbon technologies, and to implement innovative financing approaches and engage potential private, institutional or commercial actors. This assistance could support a) mobilization of experts to be embedded in sponsor organizations to help set up operations and b) targeted training and 'on-the-job' capacity building for relevant staff. Depending on the project need, training could be extended to technology suppliers to strengthen the value-chain for green technologies in the project, or to target SMEs or MSMEs in a particular sector to enable better engagement in projects engaging with SMEs (e.g. green tourism projects).
- **Sub-activity 3.2.3. Safeguards Frameworks Implementation (for effective safeguards implementation):** Targeted training for project sponsor staff to build awareness of ADB and GCF safeguards

(environmental and social) requirements, and to strengthen skills, capacity and knowledge on monitoring and implementation of management plans related to environment, resettlement and indigenous people. This will include development of initial 'model' annual ESMS monitoring reports.

- Sub-activity 3.2.4. Capacity development for effective mainstreaming of gender and social inclusion issues: Support to implement project-level requirements of the ACGF GRP GESIAP, including technical and vocational training to foster women's and girl's participation in implementation of green technologies. As required, support could also be provided for integration of financial inclusion approaches targeting women, vulnerable groups or ethnic minorities/indigenous groups.

Selection of projects to be supported will be based on the following factors: a) projects must be receiving financing under Component 1 of the program b) the need for additional capacity building support (under the three areas identified above) beyond what is provided by ADB for a standard project must be justified. Provision of support will be needs-based (with specific capacity gaps identified through a needs assessment), with support provided for the first two years of program implementation only.

B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

The ACGF GRP is designed as an ADB-managed program associated with the ACGF, a facility under the ASEAN Infrastructure Fund (AIF). The AIF is owned by ASEAN countries and ADB, and administered by ADB. ADB will be the Executing Entity for all three components of the ACGF GRP. The ACGF GRP will play an instrumental role in scaling ACGF up as a long-term regionally owned green financing vehicle for ASEAN countries.

A. ACGF GREEN RECOVERY PROGRAM OPERATIONAL ARRANGEMENTS

Executing entity

As Executing Entity for the ACGF GRP, ADB will be responsible for the overall Program (Funded Activity), particularly the provision of loans as de-risking funds for low emissions sub-projects (Component 1), and the provision of technical assistance support for the development of innovative climate finance models and structures, as well as policy, knowledge and capacity building support (Components 2 and 3).

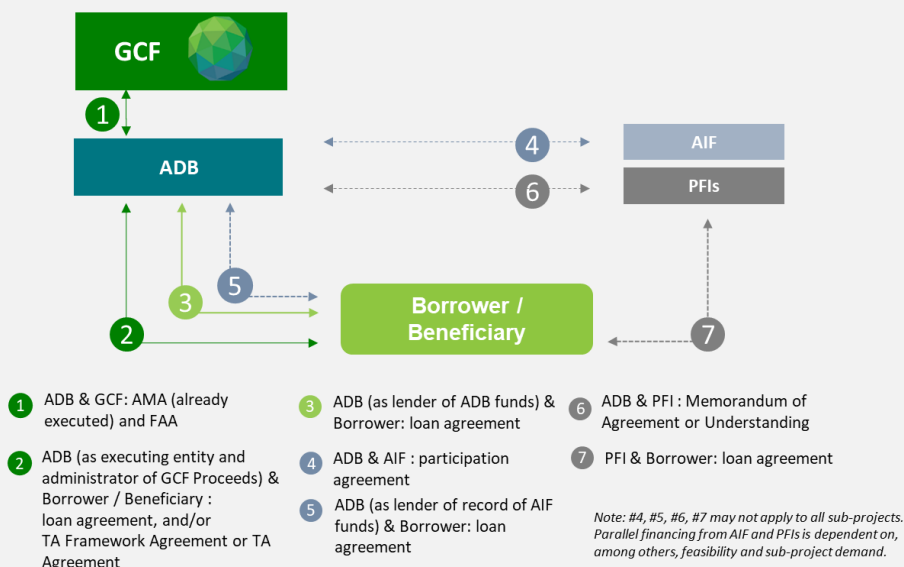
Following the GCF Board approval, ADB and GCF will enter into a program-specific legal agreement (the "Funded Activity Agreement" or "FAA") in accordance with the AMA, which will set out the specific details concerning GCF's provision of and ADB's administration of the GCF funds.

GCF funds for the ACGF GRP will be ring-fenced within an ADB GCF Trust Fund which was created pursuant to the AMA, and as such benefit from the same privileges and immunities as ADB's resources. Usage of GCF funds will be based on criteria outlined in this proposal which will be included in dedicated Program Implementation Guidelines to be developed during inception. These guidelines will complement the program Term Sheet and FAA, and include further guidance on implementation arrangements, sub-project selection and prioritization, monitoring and evaluation, and reporting.

Component 1: legal arrangements

Under Component 1, ADB will offer concessional loans to sovereign borrowers to be funded by GCF. For each ACGF GRP sub-project, ADB will sign separate loan agreements with the sovereign borrowers for each source of financing (i.e. ADB's own resources and GCF funds), and through this, each project will be implemented in compliance with ADB policies and ACGF GRP requirements. Depending on the structure of the sub-project, the ADB will also enter into project-level agreements with relevant borrower's agencies for the implementation of sub-projects. Such agencies may include financial intermediaries, such as National Development Banks and potentially, GCF Direct Access Entities, where feasible. If additional co-financing from AIF and other partner financial institutions are also included, these will be provided in parallel to the ADB and GCF funded loans. Loans funded by GCF funds are expected to be *pari passu* with the ADB loans, except for the interest rate and tenor applicable to the GCF funds.

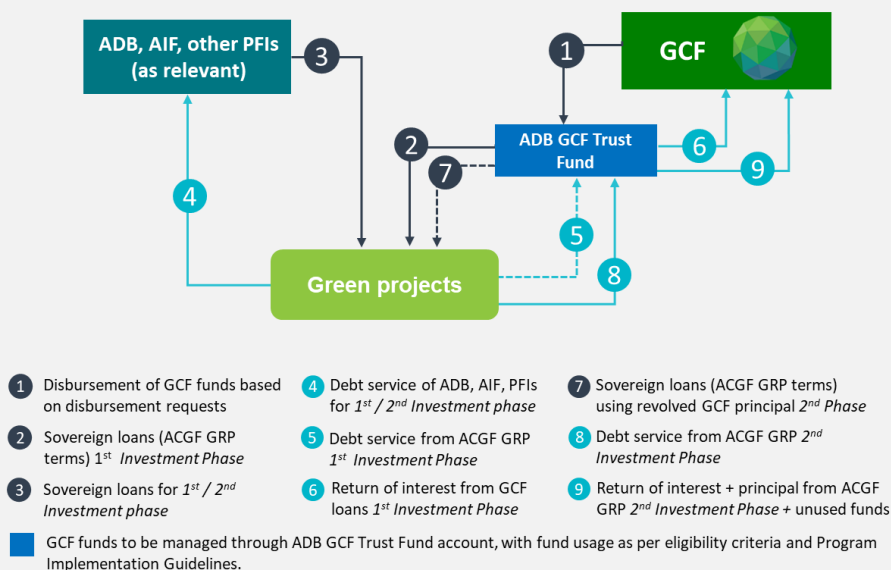
ACGF GRP – Overview of Legal Arrangements



GCF loans will be used to support projects implemented by governments, or government-owned entities based on the terms and conditions agreed with ADB in each respective project's loan agreements and project administration manual (PAM). Each potential project will be identified during ADB's country programming process, prepared in accordance with ADB's internal policies and procedures, and evaluated against the criteria presented in this proposal and agreed with GCF, to determine eligibility for funding under the program. ACGF GRP sub-projects will be fully administered by ADB and likewise benefit from ADB's project preparation, due diligence processes, project administration, and monitoring and evaluation systems. Each project will be presented for approval to the ADB Board on a transaction-by-transaction basis, which approval shall include the provision of GCF funds to be administered by ADB.

Component 1: Flow of funds

ACGF GRP – FLOW OF FUNDS (LOANS)



First phase of sub-projects. The first phase of investment (i.e. the period during which GCF funds will be disbursed by ADB to sub-projects) will run from 2021 to 2027. During this period, sub-projects will be identified in accordance with ADB's country programming process, and selected using the criteria presented in this proposal. Disbursement requests from ADB to GCF are expected to be made on an annual or semi-annual basis, and will be based on expected ADB approval dates for projects in the ACGF GRP pipeline, in accordance with each individual project's projected disbursement plans and timelines. Funds will be disbursed by GCF into the ADB GCF Trust Fund, and subsequently deployed to approved sub-projects in accordance with ADB policies and procedures.

Payments of interest and principal from GCF funded sub-projects in the first phase of investment will be repaid back to ADB, into the ADB GCF Trust Fund. Interest income from the first phase of investment will be returned to GCF, whereas principal repayments will be retained in the ADB GCF Trust Fund, for investment in a second phase of sub-projects.

Second phase of investment. The second phase of investment will run from 2028 to 2039, as soon as principal repayments are received from the first phase of investment. For the second phase of investment, repayments of GCF principal from the first phase will be used to extend loans to new sub-projects that have been identified in accordance with ADB's country programming process, and selected using the criteria presented in this proposal. Funds will be deployed to approved sub-projects in accordance with ADB policies and procedures. Payments of interest and principal for GCF funded loans from the second phase of investments will be repaid back to the ADB GCF Trust Fund, and the principal, interest payments, and any unused funds or income will be subsequently returned to GCF.

Component 2 and 3: legal arrangements & flow of funds

ADB, in its capacity as the Accredited Entity and Executing Entity, shall be responsible for the provision of technical assistance support as outlined under Components 2 and 3. GCF grants will be provided to the ADB GCF Trust Fund and implemented by ADB, either through a Technical Assistance Framework Agreement or a stand-alone Technical Assistance Agreement. Technical assistance activities for project structuring, project implementation and knowledge and capacity building will be implemented by the existing ADB team that administers the ACGF/AIF, and the ACGF Project Structuring Team. Activity 2.3 will be implemented by the Office of Public Private Partnerships.

B. KEY STAKEHOLDERS

ADB

ADB signed the GCF Accredited Master Agreement (AMA) with the GCF on 17 August 2017. As a GCF AE, ADB and GCF have entered into several project-specific legal agreements which are under implementation, delivering climate impacts throughout ADB's developing member countries. In Southeast Asia, ADB has an extensive background in supporting climate change projects through its country program and regional cooperation activities. ADB committed USD3.9 billion in climate finance in Southeast Asia between 2016 and 2019 from own funds as well as external resources. The ACGF GRP will build on and extend ADB's climate operations in the region to develop and finance a new generation of high potential low-emission projects that will serve as a demonstration for the region.

In its capacity as AE and Executing Entity²⁴, ADB will administer loans and technical assistance funds from GCF under the ACGF GRP as follows:

- Provide loans as per the ACGF GRP terms and requirements, alongside loans using ADB own funds and other ADB-administered parallel financing (as appropriate), applying the same duty of care and due diligence for all sources.

²⁴ Here the proposal uses 'Executing Entity' as per the GCF definition.

- Carry out such management and administration of the GCF funds for loans and technical assistance in accordance with its policies, procedures and practices, and with at least the same degree of care as it uses in the administration of its own funds or other donor funds, taking into account the provisions of the AMA.
- Assign the ADB staff designated as ACGF Unit Head as focal point for the program (with alternate being the AIF Administrator), with dedicated staff resources within the ADB Southeast Asia Department to manage the ACGF GRP as part of extended implementation arrangements for AIF and ACGF.
- Oversee and manage the dedicated ACGF Project Structuring Team, staffed by full-time and intermittent experts, including an additional three to four experts specifically engaged for the ACGF GRP, with the following responsibilities:
 - originate sub-projects and develop a pipeline for ACGF GRP funding, provide support to structure sub-projects and identify financing partners;
 - provide climate expertise to develop green frameworks and targets for sub-projects;
 - identify and screen potential sub-projects, review project documentation and ensure the project meets the program's criteria;
 - verify and monitor project and facility impacts and prepare annual performance reports to GCF;
 - implement ACGF GRP technical assistance activities on policy, knowledge and capacity building;
 - manage and monitor procurement and contracts.
- Work closely with other ACGF financing partners to identify additional parallel financing sources for sub-projects if needed.

In its capacity as administrator of the ASEAN Infrastructure Fund:

- At a broad policy level, ADB will report to ASEAN countries through the Finance Ministers' track or other channels as relevant on progress made on the ACGF more broadly (including ACGF GRP).

Role of ASEAN governments through AIF & ACGF

ACGF GRP is a distinct ADB-managed program focused on green recovery, which is also intrinsically linked to and leverages the strengths of the ACGF vehicle under the ASEAN Infrastructure Fund (background below). The linkages between ACGF GRP and ACGF/AIF are as follows:

- The ACGF GRP will build on the **institutional structure** of the ACGF/AIF (i.e. the AIF Board of Directors representing ASEAN ministries of finance and ADB) which ensures strong country engagement and ownership. Members of the AIF Board will serve as focal points for the program in each country, ensuring a transparent and country-owned process in the identification, development, and financing of projects.
- ACGF GRP will build on ACGF **implementation arrangements**, and will be managed by a dedicated ADB/AIF team which is linked to sector and country teams, and will leverage the country-driven project origination process used for ACGF/AIF, ensuring implementation efficiencies and effectiveness.
- ACGF GRP will build on best practices in **selecting green projects** established under ACGF using the three parameters in the ACGF Investment Principles and Eligibility Criteria (green impact, bankability, private sector mobilization) (See Annex 23 for an overview of the criteria).

Within this context, finance ministries, as members of the board of the ASEAN Infrastructure Fund, will serve as focal points for the ACGF GRP in their own countries. In this context, ADB will:

- Update the AIF Board on potential GCF support for eligible sub-projects through the ACGF GRP, during biannual board meetings and progress reports;
- Share information with the board on progress made related to the ACGF GRP; and
- Support AIF Board members to coordinate with NDAs to ensure that potential ACGF GRP sub-projects are aligned with GCF country programs.

Background to AIF & ACGF

The ASEAN Infrastructure Fund (AIF) was established in 2011 as a regional infrastructure financing vehicle by ASEAN countries and ADB, and is managed and administered by ADB. It is run by a Board of Directors, representing all ASEAN member state governments, generally from respective Ministries of Finance, and ADB, currently chaired by Indonesia (2019-2021). In 2018, the AIF Board of Directors approved the creation of the ACGF, with financing of 15% of AIF's equity, with the intention of piloting an approach to finance green

infrastructure in the region. The ACGF was launched on the 4th of April 2019 in Chiang Rai, Thailand by ASEAN finance ministers in the margins of the ASEAN Finance Ministers Meeting. ADB and other development partners made high-level commitments towards the co-financing of ACGF projects, bringing the total co-financing expected to be mobilized for ACGF to USD 1.4 billion.

Since 2019, significant progress has been made on implementation of ACGF:

- Development of an operations plan and finalization of the ACGF Investment Principles and Eligibility Criteria²⁵ to determine the screening and selection of projects based on three aspects a) climate impact and contribution to other environmental objectives b) financial bankability and c) potential to mobilize private investment.
- Identification and support for structuring of 22 projects to integrate innovative financial models, and embedding of climate targets in project design.
- Approving of 3 projects qualifying under the ACGF Investment Principles and Eligibility Criteria for inclusion in the 'firm' AIF financing pipeline, with total project cost of USD 1.4 billion, including USD 40 million from AIF, USD 823 million from ADB, USD 410 million from other development partners and the remainder from governments.
- Through ADB technical support for the ACGF, support for 2 major international roundtables on green finance between ASEAN governments & institutional investors, and initiation of a virtual 'COVID-19 Green Recovery' webinar series in 2020.

B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

GCF support through the ACGF Green Recovery Program (ACGF GRP) is critical to promote low-emission projects for post-COVID recovery period and to support countries avoid a lock-in of emissions intensive growth for the next two decades.

1) Presenting a strong signal for a green recovery in Southeast Asia by capitalizing on a limited window of opportunity, starting in 2021

In the post-COVID context, there is a high risk that fiscal stimulus programs and the consequent acceleration of economic recovery takes place along a non-sustainable pathway, leading to lock in of high-carbon infrastructure. GCF's central position in the international climate finance architecture serves to give direction and provide incentives for countries to move forward in seeking a programmatic as well as operational alignment with the Paris Agreement.

The ACGF GRP is seeking to overcome the risk of ASEAN countries reverting to a business-as-usual trend by utilizing support provided by a sizeable GCF contribution which leverages ADB's substantial country programs in the region, as well as applying robust standards to support countries prioritize infrastructure projects with significant potential to reduce emissions. Representing the **first substantive green recovery program in Asia**, the ACGF GRP will kickstart investments in the post-COVID context through combined support for innovative project model development and provision of de-risking loan funds.

There is a limited window of opportunity to influence COVID recovery starting in 2021, when multi-year stimulus packages will start being rolled out by governments. Through GCF support under the ACGF GRP, rapid support will be provided for structuring 'finance-ready' projects and providing de-risking loans to enable the financing and implementation of low-emission projects. With GCF support starting in 2021, tentative low-emission projects currently in government pipelines (like the projects presented in this proposal) which require additional support to develop and finance, will be implemented as planned. Support to increase 'financeability' of 2022 and 2023 sub-projects will help raise the profile and benefits of these projects to governments, allowing them to be included in planned stimulus packages and programs.

²⁵ The Criteria were developed through extensive consultations with major European development partners, incorporate elements from leading global efforts on green finance (e.g. EU Sustainable Finance Taxonomy) and are aligned with ASEAN government priorities for climate action.

2) Deliver significant direct climate benefits through the application of GCF-aligned standards and norms.

This will deliver emissions reductions of 119 million tonnes CO₂ emissions over the lifetime of the program, as well as direct and indirect co-benefits linked to the implementation of activities that are also fully aligned with the SDGs. GCF standards and criteria supports increased ambition and use of performance thresholds that would otherwise not be followed within development-focused, economic recovery programs. GCF support will accelerate the greening of ACGF infrastructure investments and support more replicable project models to be demonstrated. The volume of GCF financing allowed per project has been set to particularly incentivize Priority Green projects, which are expected to contribute to environmental outcomes in the longer term. With GCF financing, ACGF projects will help to reduce GHG emissions and contribute to other environmental objectives, such as reducing air and water pollution, improving solid waste management, and promoting sustainable natural capital management.

3) Catalyze global green capital flows, both through directly funding projects as well as their replication, through the innovative use of funds

The program will help incentivize green projects in a post-COVID period by covering the incremental costs of addressing climate change mitigation, in a consistent and swift way. Enabling the ASEAN infrastructure sector to access the rapidly growing global market for green and/or sustainability bonds will demonstrate to governments that there are funding alternatives for their infrastructure programs that allow them to avoid long-term infrastructural lock-in. Without this, the potential is high for a situation to develop where unsustainable infrastructure development starts to accelerate to drive the recovery, but without ADB and GCF support to make it “green”. GCF funding will be critical to reduce risks related with green technologies and solutions during early stages of project cycles and to provide governments and other stakeholders with the required training to access green and sustainable financing structures. This is especially important considering potential revenue shortfalls faced by infrastructure projects in the region due to the economic impacts of COVID-19 and related shutdowns.

4) Strengthen the economic recovery of ASEAN countries through the creation of ‘green jobs’

Market and country data show that the suspension and cancellation of infrastructure projects across all sectors in Asia peaked in late March 2020 during the height of the COVID crisis²⁶. As the recovery commences at full speed and public resources are being earmarked for infrastructure programs to lead it, the GCF can intervene to rapidly provide a high volume of flexible funding to spur low-carbon projects. This will allow countries to deploy and train their workforce towards decent jobs that contribute to preserve or restore the environment and deliver sustainable long-term growth. Achieving sustainability of the projects within this facility and the shifting of the employment paradigm towards green jobs are inextricably linked, as the ACGF GRP foresees the creation of 340,000 green jobs, amplifying the concept of the ‘Just Transition’ in ASEAN member states.

5) Assist governments in prioritizing and strengthening pipelines of low carbon infrastructure as well as in shaping bankability and other enabling factors to facilitate further ‘green’ investments.

The close combination of technical assistance grants (for capacity building, knowledge creation and policy dialogue) and loans to support low-emission infrastructure investment will enhance the enabling environments within which projects are developed. Early identification of low-carbon alternatives (e.g. waste-to-energy with integrated recycling and recovery, rather than standard incineration), coupled with technical advisory support to integrate best performing technologies within the designs of projects (e.g. electric vehicles, energy efficient street lighting) and to identify business models to mobilize private investment climate will build the capacity of countries to develop and finance a strong pipeline of green projects.

This is achieved through policy dialogue and technical capacity building, as well as by providing the support to develop green pipelines hand-in-hand with countries. GCF financing will help create more bankable projects by

²⁶ <https://www.aiib.org/en/news-events/media-center/blog/2020/First-Came-Cancellations-Then-Came-Stimulus-Tracking-Infrastructure-Sentiments-Through-COVID-19-Using-Big-Textual-Data.html>

providing lower-cost financing for capital investment projects than would be possible without GCF support. An analysis of financing options for the 6 identified projects in the pipeline for the program demonstrates that the blended interest rate available to projects would be – on average – 24% lower with GCF support than without. This is especially important when considering that USD funds are subject to sovereign guarantee and currency conversion fees, and the final cost to project sponsors in the region can increase by 4-7%, depending on the country.

B.6. Exit strategy and sustainability (max. 500 words, approximately 1 page)

GCF financing support has an impact beyond financing the targeted projects that are included in this application. By supporting one of the few green de-risking initiatives in the region, it brings an explicit focus to the need for more such vehicles nationally which could better leverage and use government funds. The leveraging of GCF resources alongside ADB funds and other sources will create the critical mass of fund volumes to achieve impacts and a more de-risked nature which will then open the way for mainstreamed private sector and climate support.

The combination of de-risking with incentive financing, and project origination and structuring will also create demonstration projects that are both bankable and green for replication in sectors hitherto without many such models, and hence support the ‘greening’ of overall infrastructure pipelines in ASEAN countries. Sustained integration of climate actions along recognized international standards will support green loan and green bond development within the region. During and beyond its role in ACGF, the GCF contribution will help unlock the much-needed volumes of public and private green finance in the region in order to steer investments and job creation towards systematic sustainability. In a sense, the GCF is bridging a gap towards a more sustainable future, ensuring both sustainability and replicability.

From an institutional sustainability perspective, the capacity building, technical assistance and policy dialogue components will strengthen the counterparts’ capacity to then undertake similar green projects with a decreasing level of external support, reinforcing policy making and pipeline building. The ACGF GRP will also play an instrumental role in supporting the scale-up of the ACGF as a regional green financing vehicle for Southeast Asia.

As also pointed out in the risk table, in order to minimize any potential risk arising from low capacity in processes, including for environmental and social sustainability, gender and social inclusion, and procurement, the program foresees training for borrowers and project developers to strengthen legal, institutional and technical proficiencies that will outlast the program implementation period itself.

C. FINANCING INFORMATION							
C.1. Total financing							
(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)		Total amount		Currency			
		300 (635 revolved funds)		million USD (\$)			
GCF financial instrument		Amount	Tenor	Grace period	Pricing		
(i)	Senior loans	280 + 335 (revolved funds)	15 years	6 / 7 / 8 years	0 / 0.5 / 1.0 ²⁷ %		
(ii)	Subordinated loans	Enter amount	Enter years	Enter years	Enter %		
(iii)	Equity	Enter amount	Enter years		Enter % equity return		
(iv)	Guarantees	Enter amount					
(v)	Reimbursable grants	Enter amount					
(vi)	Grants	20					
(vii)	Results-based payments	Enter amount					
(b) Co-financing information		Total amount		Currency			
		Enter amount		Options			
Name of institution		Financial instrument	Amount	Currency	Tenor & grace	Pricing	Seniority
ADB		Senior Loans	3,385 (estimated)	million USD (\$)	Varies by project country ²⁸	Varies by project ²⁹ %	pari passu
Click here to enter text.		Options	Enter amount	Options	Enter years Enter years	Enter%	Options
(c) Total financing (c) = (a)+(b)		Amount		Currency			
		4,020		million USD (\$)			
(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)		<p>As a program, GCF funds in the ACGF GRP will support 20 projects over the lifetime of the program, through two cycles of investment. Overall, USD300 million GCF funds are expected to support projects with a total project cost of USD 4,000 million.</p> <p>At a sub-project level, GCF funds will be complemented by co-financing from ADB, with loan amounts and terms varying by sub-project.</p>					
C.2. Financing by component							

²⁷ These include interest rates and service fees, and will apply to all sub-projects in the first investment phase – see Table 4. For sub-projects in the second investment phase, pricing of 0.25% will be applied for CAM and LAO and 1.25% will be applied for MAL.

²⁸ For Group A countries (CAM and LAO): 32 years tenor, 8 years grace period. For other countries supported by ADB Ordinary Capital Resources (OCR) i.e. INO, PHI and MAL: tenor varies by projects, subject to an average loan maturity of 19 years (note, tenor and maturity are different). See <https://www.adb.org/what-we-do/public-sector-financing/lending-policies-rates>.

²⁹ For Group A countries (CAM and LAO): 1% during grace period, 1.5% during amortization. For other countries supported by ADB Ordinary Capital Resources (OCR) i.e. INO, PHI and MAL: under the LIBOR-based lending model, interest rate would be 6month LIBOR + 50 bps, maturity premium (of applicable) and commitment fee of 15 bps. See <https://www.adb.org/documents/overview-libor-based-loans-sovereign-and-sovereign-guaranteed-borrowers>

Component	Output	Indicative cost million USD (\$)	GCF financing		ADB financing	
			Amount million USD (\$)	Financial Instrument	Amount million USD (\$)	Financial Instrument
Component 1: Provision of loans for de-risking low-emission projects	Loans for low-emission projects	4,000	280 + 335 (revolved financing)	Senior Loans	3,385	Senior Loans
Component 2: Development of innovative climate finance models and structures	Activity 2.1: Scaling up Green and Sustainable Bonds (for sovereigns, cities and SOEs)	1.83	1.83	Grants		
	Activity 2.2: Innovative Green Finance Recovery Mechanisms (for low-emission projects)	3.76	3.76	Grants		
	Activity 2.3 Scaling up hybrid Public-Private Partnership structures (PPPs) for renewable energy and sustainable cities	6.65	6.65	Grants		
Component 3: Policy, knowledge and capacity building support	Activity 3.1 Promoting national Green Finance Recovery strategies	2.23	2.23	Grants		
	Activity 3.2 Ensuring effective projects	3.26	3.26	Grants		
Management & monitoring	Project management of TA components	0.95	0.95	Grants		
	Monitoring & evaluation	1.32	1.32	Grants		
Indicative total cost (USD)		4,020	300 (635 revolved financing)		3,385	

C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)

C.3.1 Does GCF funding finance capacity building activities?

Yes ☒ No ☐

C.3.2. Does GCF funding finance technology development/transfer?

Yes ☐ No ☒

A portion of GCF financing will be extended as technical assistance grants to help build awareness, knowledge and further policy dialogue on green finance in ASEAN countries, with the specific aim of supporting increased transactions and building capacity to better identify, structure and implement low-carbon project opportunities. Capacity building activities will include: a) under Activity 3.1, targeted training on innovative finance through the ACGF '6 Champions' program will be provided to identify and support green finance leaders, and provide a deeper understanding of innovative finance approaches in climate projects; b) under Activity 3.2, targeted capacity building to help governments i) monitor, verify and evaluate climate and other sustainability aspects of the project; ii) integrate advanced climate technologies and interventions during project implementation; iii) effectively implement ADB and GCF safeguards on environment, involuntary resettlement and indigenous peoples and iv) integrate gender and social inclusion aspects into projects.

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's [Initial Investment Framework](#).

D.1. Impact potential (max. 500 words, approximately 1 page)

The ACGF GRP has been designed to support substantial CO₂ reductions from across multiple sectors:

- Through the **revolving use of GCF funds**, the program will finance 20 sub-projects over its lifetime (in two phases of investment), thereby maximizing the impact of scarce GCF resources for a longer pipeline than would be possible with a single use of GCF funds.
- Through the use of ACGF criteria, **promotion of the use of international best practice performance thresholds** for emissions reductions, and the focus on the major drivers of emissions in the region, the program ensures that only projects with substantial CO₂ reductions are supported.
- By setting a **portfolio level performance target** (45% Priority Green investments over the lifetime of the program), the program considers the need to support governments to prioritize low-emission projects, while increasing ambition over time. As a result, the first phase of investments will support a higher share of Green projects and the second phase of investments will support a higher share of Priority Green projects, with a balance of Green and Priority Green projects being supported over the program lifetime.

The expected mitigation impact is **119 million tonnes CO₂eq saved** over the lifetime of the program. This is a conservative estimate based on identified investments in the first phase of investment (with estimated emissions savings of 23.5 million tCO₂e over individual lifespans) and projected emission savings from the overall portfolio. For the first phase of investments, estimates from identified investments in the pipeline were augmented with estimates from 2 stylized projects in ADB's pipeline in 2022 and 2023 to ensure a coverage of the types of sub-sectors targeted by the program. In scaling up projected emissions savings the following assumptions have been made a) taking into account ADB's historical lending and planned pipelines, the mix of project sectors / subsectors will remain largely the same, b) abatement potential is assumed to remain the same over time, as it is expected that higher emissions savings over time from Priority Green projects will be largely offset by improvements in country emissions profiles (due to implementation of NDCs).

Table 7: Emissions reductions and green jobs created (identified + stylized projects)

Project	Impact potential	
	Emissions reductions (tCO ₂ eq lifetime)	Green jobs created
SDG Indonesia One Green Finance Facility	15.4 million	77,000
Philippines: Davao Public Transport Modernization Project	3.4 million	9,000
Cambodia: Blue Carbon Project	1.6 million	13,000
Cambodia: Energy Efficiency Sector Development Program	3.0 million	5,000
<i>Stylized project: sustainable transport (inter-urban rail) project in Philippines</i>	<i>1.3 million</i>	<i>tbc</i>
<i>Stylized project: renewable energy project in Indonesia</i>	<i>4.2 million</i>	<i>tbc</i>

At the project level, the calculation methodology for each identified investment is based on project parameters and design data from ongoing and completed feasibility studies and best estimates based on comparable projects (see Annex 22). GHG calculation methodologies follow ADB guidelines on GHG accounting for projects, and savings are estimated against a baseline or Business-as-usual scenario. For example, potential emission savings from the renewable energy and energy efficiency projects in the pipeline are based on the current grid emission factors, taken from the harmonized IFI grid emission factors for countries. The impact potential for projects will be documented in the feasibility studies and ADB loan approval documents, and where possible, green indicators and targets will be included in the monitoring frameworks for individual projects.

D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

The program has been designed with the aim of supporting a strategic and transformational shift in the way countries invest in infrastructure, in the limited time window for planning and rolling out post-COVID recovery. As

much of the investment need for the region is for new infrastructure, by supporting low-emission projects, the program will help ASEAN countries achieve transformational planning and programming and avoid locking-in emissions in the longer-term.

The program design includes a strong focus on **scaling up and replicating low-emission infrastructure investments** in developing ASEAN member countries, beyond the individual investments that will be supported by ACGF GRP, through the following:

- Demonstration of best practice. By supporting best available technologies and encouraging projects to meet international thresholds for mitigation impact potential, environmental performance, procurement, financial fiduciary standards and risk assessments, every ACGF GRP project is expected to serve as demonstration, build knowledge and strengthen awareness among governments, project developers and commercial financiers.
- 'Pathfinder' investments. The demonstration effect is expected to be higher in low-income countries, such as Cambodia and Lao PDR, where a green project may be the first of its type in a city or province. For example, the Cambodia Blue Carbon project will enhance blue carbon by restoring and replanting 11,770 hectares of mangrove forests while addressing key challenges to the marine fisheries sector through a first-of-its-kind catalytic green financing model to mobilize funds. Given the critical need for nature-based approaches for agriculture and natural resources projects, there is significant potential to replicate such schemes in other countries in Southeast Asia.

The program will also **strengthen institutional structures** to have long-term impacts, through:

- Innovative financing to change the way governments invest. The traditional use of public or sovereign guaranteed funds for infrastructure in the region means that investments typically receive full financial support by governments or by development partners. In the case of ACGF, the inclusion of criteria on mobilization and bankability, and by structuring the program as a revolving and multi-instrument vehicle, will help illustrate to governments the efficient use of capital and appropriate project design for mobilizing private investment. The SDG Indonesia One Green Finance Facility, for example, aggregates a pipeline of smaller projects for financing by public and private actors, and will use ADB and GCF loans in a range of instruments, including debt and equity. The project will serve as a template for other vehicles under the SDG Indonesia One platform.
- Developing a green finance vehicle for the region. The ACGF GRP will play an instrumental role in supporting the scale-up of the ACGF as a regional green financing vehicle for Southeast Asia, by demonstrating how the ACGF GRP model will work in financing a pipeline of projects against common criteria and standards. In the long-term, AIF shareholders can build on this experience to institutionalize ACGF.

Technical assistance funds will contribute strongly to **the creation of an enabling policy environment**, by:

- Supporting countries develop and define national financing strategies for a green recovery, which also demonstrate national level backing for ACGF GRP sub-projects.
- Building capacity of government officials through the ACGF 6 Champions to better understand and apply innovative climate finance in their work, thereby increasing their awareness and appetite for such projects in the future.
- Developing and embedding innovative finance models and creating context-specific environments for these. For example, Activity 2.3 will scale up hybrid public-private partnership vehicles, especially for renewable energy projects, which will be critical in developing the enabling conditions for private investment. For example, public sector financing – including from ACGF GRP – could be used to help build the ancillary infrastructure for a solar or wind project, and with targeted technical assistance for the government in structuring and carrying out a competitive tendering process, significant private investment could be harnessed.

D.3. Sustainable development (max. 500 words, approximately 1 page)

The ACGF GRP has been designed to support low-emission projects within the context of sustainable economic development, especially during the COVID-19 recovery period. At a broad level, the program directly supports the following Sustainable Development Goals (SDGs), including: Affordable and Clean Energy (6); Decent Work and Economic Growth (7); Industry, Innovation, and Infrastructure (8); Sustainable Cities and Communities (10); Life on Land (14); Life underwater (15).

Economic co-benefits, including green jobs

The program will support post-COVID recovery by investing in green infrastructure that supports jobs and economic growth. Based on an assessment of projects in the ACGF pipeline, and the assumptions presented under Impact Potential above, the program is estimated to create 340,000 green jobs. Beyond this, the program will support a range of broader economic benefits through specific investments such as enhanced trade and competitiveness, and supporting small- and medium-enterprises development.

Environmental co-benefits

The program design specifically emphasises the selection of projects that meet both climate and broader environmental objectives, using project-level criteria that incorporate both elements. ACGF investment criteria require all projects to demonstrate a reduction in emissions as well as a demonstrated contribution to an additional environmental objective. Specifically, the program is expected to:

- (i) improve air quality (through more sustainable urban transport systems and public transport);
- (ii) improve water quality (through development of energy-efficient urban water supply and sanitation systems, waste management systems);
- (iii) promote healthy and climate-resilient ecosystems and biodiversity (through reforestation and restoration of mangroves, promoting sustainable forest management, sustainable agriculture practices to preserve soil carbon etc.); and
- (iv) promoting more efficient use of resources, (through reducing the use of energy, encouraging integrated waste management approaches etc.).

Contribution to environmental objectives will be monitored by the program based on project level reports, and reported to GCF through annual performance reports.

Social co-benefits and gender-sensitive development

Overall, the program will support projects in water and waste, and on energy, with expected co-benefits in terms of enhanced access to energy, improved access to water supply, and improved access to sanitation and hygiene infrastructure.

Beyond this, ACGF GRP has been designed to strongly support sub-projects achieve co-benefits in terms of gender and social inclusion:

- At a program level, ACGF GRP has adopted a gender and social inclusion target (80% of projects directly advance gender and social inclusion [GESI] by 2039) to help ensure the portfolio overall supports these issues.
- The program GESIAP will help guide action at the sub-project level, including preparation of gender assessments and action plans, promotion of opportunities for women's economic empowerment, and promotion of equitable participation in trainings and promotion of green jobs for women and vulnerable groups.

At a sub-project level, potential environment and social risks will be mitigated through the application of the program ESMF which is aligned with the ADB Safeguards Policy Statement (SPS), and through this, will be appraised to identify and mitigate any direct, indirect, cumulative, and induced risks and impacts such as: a) adverse impacts/risks on the environment; b) adverse impacts and risks of involuntary resettlement; and c) adverse impacts on indigenous peoples and their communities that may arise from the implementation of subprojects.

D.4. Needs of recipient (max. 500 words, approximately 1 page)

Vulnerability of economies due to COVID-19

The COVID-19 health crisis has severely impacted the ability of governments to implement NDCs. Pre-COVID, the overall financing need for green infrastructure in developing ASEAN member states was estimated at USD210 billion per year between 2016 and 2030 to support needed investment in climate-compatible infrastructure. Post-COVID, governments are facing a major slowdown, with the region's GDP expected to contract by 4.4% in 2020, from an increase of 4.4% in 2019³⁰. The impact of COVID-19 is estimated to generate losses ranging from USD163 billion to USD253 billion (4.6% to 7.2%), for short and long containment scenarios, respectively, and job losses could range from 11.6 million to over 18.4 million³¹. Country-level estimates paint a more dire picture, with most countries in the region expected to record negative GDP growth in 2020, and to face a fiscal deficit (see Table 8).

Table 8. COVID-19 indicators (as of 31 July 2020)

Country	No. of Cases (as of 22 June 2020)	GDP forecast (Worse) / Fiscal balance (%)	Job losses (million)	Poverty estimates (pre-/post-COVID- 19) (%)	Economic measures (USD billion)
Cambodia	130	-5.5/-12.8	0.37	28.0/43.6	2.1
Indonesia	46,845	-0.7/-6.3	1.8	9.4/11.2 –13.0	64.3
Malaysia	8,587	-4.0/-4.7	2.4 (MIER worst case estimate)	0.4 (2016)/NA	35.5
Philippines	30,682	-5.3/-8.1 to -9	4.3 (Q2 2020)	16.6/20.7	19.8

Source: ADB from aggregated sources (see Annex 2B, page 9 for full list)

The ACGF GRP has been designed to take this into account by a) providing loans at low interest rates and with longer grace periods (reflecting lower expected revenues from projects in the next 4-5 years) b) revolving funds to maximize low-interest funds over more projects c) prioritizing projects that can deliver low-emission development while creating substantial green jobs and d) supporting countries develop green financing strategies for COVID-19 recovery.

Country context and climate profile

The program has also been designed to take into account very different country contexts and emissions profiles. Country per capita incomes range from around 5000 USD in Cambodia to over USD 18,000 in Malaysia. In countries like Indonesia or Philippines, low-emission projects have so far relied mostly on public or sovereign-backed funding, with many not being realized due to a lack of prioritization in public budgets. In countries like Cambodia and Lao PDR, such investments have relied exclusively on increasingly scarce bilateral and multilateral donor grants, and to a lesser extent on concessional MDB loans. The ACGF GRP has been designed to use climate finance catalytically (without a reliance on grants), with pricing differentiated by country context, to leverage a broader range of financing for high-performing low-emission investments, including from the private sector.

Emissions wise, larger economies like Indonesia and Malaysia have increasing energy-related emissions footprints, while deforestation and forest degradation contribute to losses in carbon sinks across the region. The program has therefore been designed to finance mitigation projects from the four main sectors that can address this (i.e. energy, transport, multi-sector, urban and agriculture & natural resources).

Barriers to financing for low-emission projects

³⁰ ADB. 2020. Asian Development Outlook (ADO) 2020: What Drives Innovation in Asia?
<https://www.adb.org/publications/asian-development-outlook-2020-innovation-asia>.

³¹ ADB 2020. An Updated Assessment of the Economic Impact of COVID-19, No.133, May 2020.

Specific barriers to accessing public and private climate finance are as follows:

- **Costs:** Grid-connected renewables, sustainable transport, or low-carbon waste management projects are not new to the region, however there is still a perception among governments that these entail higher up-front costs than conventional alternatives. For example, many governments still do not prioritize electric vehicles despite their prevalence in neighboring countries, such as China.
- **Projects:** There is a major shortage of bankable, green projects, despite an increase in green bonds and other green financing instruments in the region.
- **Capacity:** Governments, state-owned enterprises, and city governments lack the capacity to develop and structure green projects that commercial financiers would be willing to invest in. This is seen, for example, in weaknesses in public-private partnerships processes and frameworks for transport projects, or in the case of the gaps in the design of solar or wind tenders in the region.

The program has been defined to overcome these barriers by a) providing financial structuring support combined with financing (targeted to country contexts) specifically aiming to de-risk projects – together this should help create a pipeline of bankable projects; and b) developing champions in key ministries and municipal governments to help drive forward the green finance agenda in individual countries.

D.5. Country ownership (max. 500 words, approximately 1 page)

As ACGF GRP is associated with ACGF, a vehicle owned and driven by ASEAN governments, the program is well aligned with regional and national policies related to infrastructure, environment, and climate change. At a regional level, the program aligns with the ASEAN's commitment to tackling climate change, whereby ASSC Blueprint 2025 provides for strategic measures in order to move ASEAN towards "Sustainable Climate", including strengthening efforts to reduce GHG emissions from main activities of development, facilitating the development of comprehensive and coherent responses to climate change challenges, and mainstreaming climate change risk management and GHG emission reduction in sectoral planning. It also supports other regional green policies, such as the ASEAN Regional Strategy on Sustainable Land Transport, the ASEAN Sustainable Urbanisation Strategy, clean energy commitments under the ASEAN Plan of Action for Energy Cooperation, and the Master Plan on ASEAN Connectivity 2025.

At a national level, the ACGF and the program supports commitments made by ASEAN countries in their NDCs/INDCs, are where available, is in line with the participating countries' GCF country programs (i.e. Indonesia, Lao PDR, Philippines) indicating as priority sectors projects in sustainable energy, transport, agriculture and natural resources. The country profiles (see Annex 2B) also detail the existing climate policies and needs in each participating country which the program aims to respond to. The program is in accord with each of the participating countries' climate commitments, as detailed within their NDCs, and summarized in Table 8 below.

Table 8: Nationally Determined Contributions Emissions Reduction Targets

Country	Emissions Reduction Targets
Cambodia	Reduce GHG emissions 27% from baseline emissions by 2030 with international support
Indonesia	Reduce GHG emissions 26% by 2020, and 29% by 2030 from BAU levels, and 41% by 2030 with international support
Lao PDR	Identified a number of actions which it intends to undertake in order reduce its future GHG emissions, subject to the provision of international support
Malaysia	Reduce GHG intensity of GDP by 35% by 2030 from 2005 level, increase to 45% reduction with enhanced international support
Philippines	Reduce GHG emissions by 70% from BAU level by 2030 with the condition of international support

To achieve the above targets, infrastructure is noted as a priority across most ASEAN NDCs. Sectors prioritized for mitigation include transport, energy and water sectors; reforestation and forest management, maintenance of carbon sinks; as well as developing / improving infrastructure in the waste, water and agricultural sectors.

The program is also well aligned with green / climate targets in each ASEAN country's respective socio-economic development planning. For example, Malaysia's 11th Plan (2016-2020) aims to reduce GHGs emission intensity of GDP by up to 40%.

ASEAN has recently put an emphasis on promoting green jobs regionally; the organization signed the ASEAN Declaration on Promoting Green Jobs for Equity and Inclusive Growth of ASEAN Community in 2018³². The focal areas include renewable energy, agriculture, construction, energy, forestry, manufacturing, transport, waste management organization, tourism, industry and technology. This objective has been of particular importance in Malaysia, who has pledged to increase green employment domestically and in ASEAN countries³³. At present, the highest proportion of green jobs in ASEAN countries are concentrated in renewable energies, specifically liquid biofuels, which make up 53 percent of employment in renewable, large-scale hydropower, which makes up 19% of employment, and solar photovoltaic, which accounts for 14% of current employment.

Accredited entity: ADB

The ADB, as Administrator of the AIF and ACGF, has been an active partner to the ASEAN member countries in their infrastructure development goals. As an ADB-managed vehicle, ACGF projects will be part of ADB Country Partnership Strategies, and will be discussed through an annual whole-of-government country planning process.

National Designated Authority and GCF Focal Points

Non-Objection letters (NOLs) have been received by all target countries of the program. ADB has officially coordinated with and met with each target country's NDAs and relevant GCF Focal Points through e-mail and videoconference meetings to explain the program proposition and the benefits that it could provide for each respective country, and collate feedback on the program design. The NDAs and GCF focal points for the participating countries were provided with summary notes on the program. The NDAs and GCF focal points have likewise committed to coordinate with the relevant sector ministries, as appropriate.

D.6. Efficiency and effectiveness (max. 500 words, approximately 1 page)

ADB's economic and financial requirements for projects, coupled with the substantial mitigation impact of the program, ensures that the program overall is effective, and will support financially sound investments. Overall, the main indicators are as follows:

- Overall, USD 300 million GCF funding will deliver mitigation benefits at USD2.5 per tCO₂eq (GCF contribution / expected lifetime emission reductions).
- If taking into account revolving use of GCF funds, USD 635 million of GCF funding will deliver mitigation benefits at USD 5.3 per tCO₂eq (GCF contribution + revolving use of GCF funds / expected lifetime emission reductions).
- Taking into account total project costs, the program will support projects that will deliver climate change mitigation benefits at an estimated USD33.6 per tCO₂e (total project costs / expected lifetime emission reductions), based on an assessment of the ACGF pipeline and the assumptions described under Impact Potential above³⁴.

Leverage and co-financing

The program will use USD 300 million from GCF and will revolve USD 280 million out of this to support 20 projects in two cycles of investment. This will result in an effective use of USD 635 million of GCF funds (USD 300 million GCF contribution + USD 335 revolved GCF funds) to leverage USD 4,000 million in total project costs, including USD 3,385 million from ADB (efforts will be made to leverage funds from AIF and other partners). Overall, the ratio of co-financing of the program is as follows:

- Total project costs to GCF contribution: 6.3: 1
- Cofinancing from ADB to GCF contribution: 5.3: 1

Mobilization of private and commercial funds

The program has been designed to de-risk projects and catalyze private investment, either for capital expenditure or for operations and maintenance. From an analysis of the first four identified projects, USD1 GCF capital is expected to catalyze USD 4 in private finance (for capital expenditures). Note, in addition to capital costs, private

³² ASEAN. November 12 2018. ASEAN Leaders Commit to promote green jobs. Retrieved from <https://asean.org/asean-leaders-commit-promote-green-jobs/>

³³ Ibid.

³⁴ This is comparable to abatement costs of other multi-sector programs

finance for operations and maintenance expenditure is also likely to be mobilized as a result of projects, but has not been included in the above estimates.

Financial and Economic criteria and analysis

All ACGF GRP projects will be financially viable, after support from the program. ACGF Investment Criteria includes bankability criteria, and with GCF financing, projects are expected to cross a bankability threshold (e.g. a cumulative Debt Service Coverage Ratio (DSCR) of 1.05 to 1.15).

All projects will also benefit from ADB's requirements for financial management and analysis. For each project, financial analysis will be prepared in accordance with ADB's Financial Management and Analysis of Projects guidelines. In particular:

- The estimated investment and operations costs, as well as cash inflows, will be clearly presented and will be reasonable.
- The financial internal rate of return (FIRR) calculated on a real basis consistent with the ADB Financial Management and Analysis of Projects guidelines will be greater than the weighted average cost of capital.
- The FIRR will be robust under various sensitivity scenarios.

For all the proposed projects, the total economic benefits will exceed the total economic costs when analyzed in accordance with ADB's 2017 Guidelines for the Economic Analysis of Projects.

E. LOGICAL FRAMEWORK

This section refers to the project/programme's logical framework in accordance with the GCF's [Performance Measurement Frameworks](#) under the [Results Management Framework](#) to which the project/programme contributes as a whole, including in respect of any co-financing.

E.1. Paradigm shift objectives

Please select the appropriated expected result. For cross-cutting proposals, tick both.

- ☒ Shift to low-emission sustainable development pathways
☐ Increased climate resilient sustainable development

E.2. Core indicator targets

Provide specific numerical values for the GCF core indicators to be achieved by the project/programme. Methodologies for the calculations should be provided. This should be consistent with the information provided in section A.

E.2.1. Expected tonnes of carbon dioxide equivalent (t CO ₂ eq) to be reduced or avoided (mitigation and cross-cutting only)	Annual	3.7 million t CO ₂ eq ³⁵
	Lifetime	119 million t CO ₂ eq
E.2.2. Estimated cost per t CO ₂ eq, defined as total investment cost / expected lifetime emission reductions (mitigation and cross-cutting only)	(a) Total project financing	4,000 million USD
	(b) Requested GCF amount	300 million USD ³⁶
	(c) Expected lifetime emission reductions	119 million t CO ₂ eq
	(d) Estimated cost per t CO₂eq (d = a / c)	33.6 USD / t CO₂eq
	(e) Estimated GCF cost per t CO₂eq removed (e = b / c)	2.5 USD / t CO₂eq
E.2.3. Expected volume of finance to be leveraged by the proposed project/programme as a result of the Fund's financing, disaggregated by public and private sources (mitigation and cross-cutting only)	(f) Total finance leveraged	3,385 million USD
	(g) Public source co-financed	3,385 million USD
	(h) Private source finance leveraged	_____ Choose an item.
	(i) Total Leverage ratio (i = f / b)³⁷	6.3
	(j) Public source co-financing ratio (j = g / b)	5.3
	(k) Private source leverage ratio (k = h / b)	_____
	Note: In addition to the above, the program is expected to catalyze USD 4 in private and commercial finance for every USD 1 of GCF funds in capital expenditures beyond the total project costs estimated here.	
E.2.4. Expected total number of direct and indirect beneficiaries, (disaggregated by sex)	Direct	Click here to enter text. Click here to enter text. % of female
	Indirect	Click here to enter text. Click here to enter text. % of female
E.2.5. Number of beneficiaries relative to total population (disaggregated by sex)	Direct	Click here to enter text. (Expressed as %) of country(ies)
	Indirect	Click here to enter text. (Expressed as %) of country(ies)

³⁵ Lifetime emissions savings are based on expected annual savings multiplied by expected life of the project. This varies by project e.g. 20 years for a wind power project, 15 years for an electric vehicle project, 10 years for street lighting etc.

³⁶ GCF funds will be revolved, and a total of USD 635 million of GCF funds will be used (USD 615 million for loans, USD 20 million for TA grants).

³⁷ Leverage ratio is calculated using the effective use of GCF funds after loan funds have been revolved i.e. USD 615 million.

E.3. Fund-level impacts						
Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target ³⁸³⁹		Assumptions
				Mid-term	Final	
<i>M1.0 Reduced emissions through increased low-emission energy access and power generation</i>	<i>M1.1 Tonnes of carbon dioxide equivalent (t CO₂eq) reduced or avoided - gender-sensitive energy access power generation</i>	ACGF GRP Annual Reports; Validation through national statistics, other official sources (at sub-project level)	0	1,000,000	33,000,000	Impact estimates are based on aggregate performance of a pipeline of 20 sub-projects, including both known and hypothetical sub-projects. Hypothetical pipeline is based on country mitigation needs + assessment of ADB historical and projected operations in each country and sector. Lifetimes for each sub-project is project and technology specific. Full details can be found in Annex 22.
<i>M2.0 Reduced emissions through increased access to low-emission transportation</i>	<i>M2.1 Tonnes of carbon dioxide equivalent (t CO₂eq) reduced or avoided - low emission gender-sensitive transport</i>	ACGF GRP Annual Reports; Validation through national statistics, other official sources (at sub-project level)	0	1,700,000	26,200,000	The final target is defined as the ex-ante GHG impact expected over lifetime of the projects. in D.1.
<i>M3.0 Reduced emissions from buildings, cities, industries and appliances</i>	<i>M3.1 Tonnes of carbon dioxide equivalent (t CO₂ eq) reduced or avoided - buildings, cities, industries, and appliances</i>	ACGF GRP Annual Reports; Validation through national statistics, other official sources (at sub-project level)	0	1,300,000	14,600,000	Mid-term target is defined as cumulative GHG savings expected to be achieved by mid-term point; assumes all pipeline projects signed and operational.
<i>M4.0 Reduced emissions from land use, reforestation, reduced deforestation, and through sustainable forest management and conservation and enhancement of forest carbon stocks</i>	<i>M4.1 Tonnes of carbon dioxide equivalent (t CO₂ eq) reduced or avoided (including increased removals) - forest and land use</i>	ACGF GRP Annual Reports; Validation through national statistics, other official sources (at sub-project level)	0	1,500,000	45,000,000	Final target is cumulative GHG savings expected till 2039 + projected savings for the remainder of the project life as of the end of the implementation period of the project, assumes all pipeline projects signed and operational. Sub-project level validation of estimates will be through ADB project level monitoring systems.

³⁸ Mid-term evaluation will take place in 2027, and final evaluation will take place in 2039/40 (one year after the completion date of the program)

³⁹ Impact estimated here is a result of GCF financing as well as co-financing.

E.4. Fund-level outcomes

Expected Outcomes	Indicator	Means of Verification (MoV)	Baseline	Target ⁴⁰⁴¹		Assumptions
				Mid-term	Final	
M6.0 Increased number of small, medium and large low-emission power suppliers	<i>M6.3 MWs of low-emission energy capacity installed, generated and/or rehabilitated as a result of GCF support</i>	ACGF GRP Annual Reports, ADB project RRP documents, project completion reports; external / independent sources (e.g. press releases)	Existing electricity generation from renewable sources in project areas.	300	800	This assumes the expected project pipeline will be delivered as is projected (see B2), and takes into account no. of RE projects expected, assumed country, assumed size of sub-project.
M7.0 Lower energy intensity of buildings, cities, industries and appliances	<i>M7.1 Energy intensity/improved efficiency of buildings, cities, industries and appliances as a result of Fund support</i>	ACGF GRP Annual Reports, ADB project RRP documents, project completion reports; external / independent sources (e.g. press releases, statistical summaries)	To be determined during baseline studies at sub-project level.	Improvement in appliances – at least 10% (500,000 MWh / year saved)	Improvement in appliances – at least 10% (500,000 MWh / year saved)	This assumes the expected project pipeline will be delivered as is projected (see B2), and takes into account no. and type of energy efficiency projects expected (improving appliances, city-level projects, EE in public buildings), assumed country, assumed size of sub-project.
M8.0 Increased use of low-carbon transport	<i>M8.1 Number of additional female and male passengers using low-carbon transport as a result of Fund support</i>	ACGF GRP Annual Reports, ADB project RRP documents, project completion reports; external / independent sources (e.g. press releases)	To be determined during baseline studies at sub-project level.	8,000,000	20,000,00	This assumes the expected project pipeline will be delivered as is projected (see B2), and takes into account no. of public transport projects expected, assumed country, assumed size of system.
M9.0 Improved management of land or forest areas contributing to emissions reductions	<i>M9.1 Hectares of land or forests under improved and effective management that contributes to CO2 emission reductions</i>	ACGF GRP Annual Reports, ADB project RRP documents, project completion reports; external / independent sources (e.g. press releases)	To be determined during baseline studies at sub-project level.	20,000	80,000	This assumes the expected project pipeline will be delivered as is projected (see B2), and takes into account no. of agriculture / natural resources / forestry projects expected, assumed size of reforestation (based on similar projects in the region).

⁴⁰ Mid-term evaluation will take place in 2027, and final evaluation will take place in 2039/40 (one year after completion date of the program)

⁴¹ Impact estimated here is a result of GCF financing as well as co-financing.

E.5. Project/programme performance indicators

Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target ⁴²		Assumptions
				Mid-term	Final	
Financing provided to improve bankability of gender-sensitive, low-emission investments	<i>GCF financing approved for ACGF GRP sub-projects (USD million)</i>	ADB RRP documents, ACGF GRP annual reports	0	USD 280 million	USD 615 million	GCF re-invested funds estimated at USD 335 million. Based on volume of known and projected pipeline and calculated at two points (2027; 2039).
	<i>ADB co-financing mobilized for ACGF GRP sub-projects (USD million)</i>	ADB RRP documents, ACGF GRP annual reports	0	USD 1,570 million	USD 1,815 million	This is based on projected pipeline and projected disbursements as included in the program financial model.
	<i>Share of ACGF GRP sub-projects classified as 'Priority Green'</i>	ADB RRP documents, project-level climate assessments, ACGF GRP annual reports, ACGF Project Information Memos	0	20%	45%	Assumes program target will be delivered as expected, based on projected program pipeline given in financial model.
	<i>Share of ACGF GRP sub-projects approved that directly advance gender equality and social inclusion</i>	ADB RRP documents, project-level gender assessments, ACGF GRP annual reports	64% ⁴³	45%	80%	Assumes program target will be delivered as expected, also takes into account current integration of gender issues in ADB projects.
COVID-19 recovery supported through the creation of green jobs	<i>Green jobs created over program lifetime (Number of jobs)</i>	ADB RRP documents, project completion reports, ACGF GRP annual reports	0	100,000	340,000	Direct and indirect job creation in 'Green' and 'Priority Green' sub-projects.
Capital mobilized from a range of sources for replicable low-emission investments	<i>Program leverage ratio</i>	ADB RRP documents, ACGF GRP annual reports	0	1:6	1:6	Program leverage ratio calculated from financial mode based on an assumed investment pipeline.
Innovative green finance mechanisms piloted and established	<i>Green bonds issued with support from the program for ACGF GRP target cities / sector governments / SOEs (Number of bonds)</i>	ACGF GRP annual reports, strategy documents, press releases	0	2	4	No. of bond issuances expected based on budget allocation, projected demand from sovereign issuers, as well as ADB experience in implementing AIF and ACGF.

⁴² Mid-term evaluation will take place in 2027, and final evaluation will take place in 2039/40 (one year after completion date of the program)

⁴³ This is an estimated baseline across all ADB projects in Southeast Asia in 2020, however, the program-specific baseline will be confirmed during the program baseline assessment.

	<i>PPP projects developed with high potential to reach financial close (including support from ACGF GRP) (Number of PPPs)</i>	ADB concept notes, ACGF Project Info. Memos, ACGF GRP annual reports	0	2	4	No. of PPP transactions based on (a) current pipeline of potential hybrid PPPs in the region (b) budget allocation.
Bankable projects identified and structured, including PPPs	<i>Early-stage projects with embedded innovative finance models, documented in concept notes, for ACGF GRP pipeline (Number of projects)</i>	ADB concept notes, ACGF Project Info. Memos, ACGF GRP annual reports	0	5	7	Based on ADB experience in implementing AIF and ACGF, and other similar initiatives.
	<i>'Finance-ready' late-stage projects identified and included in ACGF GRP pipeline (Number of projects)</i>		0	3	4	
Enabling environment for low-emission investment improved due to strengthened capacity and policies.	<i>National COVID recovery plans / programs embedding green financing strategies (Number of plans / programs)</i>	ACGF GRP annual reports, strategy documents, press releases	0	2	2	Based on ADB experience in implementing AIF and ACGF, and other similar initiatives, and observed capacity needs in low-carbon projects.
	<i>Investors identified / engaged for transactions / projects as a result of investor roundtables (Number of projects)</i>	ACGF GRP annual reports, roundtable reports	0	4	6	
	<i>Green finance 'champions' (men and women) demonstrating increased understanding⁴⁴ of green finance (Number of champions)</i>	ACGF GRP annual reports, training reports	0	53	75	
	<i>Enhanced climate monitoring, safeguards, gender and social inclusion performance demonstrated in ACGF GRP sub-projects (No. of projects)⁴⁵</i>	ACGF GRP annual reports, project reports	0	3	4	
E.6. Activities						
Activity	Description	Sub-activities	Deliverables			
Component 1: Provision of loans for de-risking low-emission projects						
1.1 ACGF GRP loans to low-emission projects	Origination of a pipeline of projects, screening and project selection, engagement with client governments, advancing loans.	<ul style="list-style-type: none">- Origination of sub-project pipeline through engagement with ADB sectors, countries, strategic partners, city governments etc.- Screening of potential sub-projects (including those developed through support provided in C2)- Engagement with parallel finance partners to secure potential financing (if applicable)- Sub-project preparation and due diligence, including assessment of economic and financial viability, legal and financial due diligence, gender assessments, safeguards assessments and due diligence	<ul style="list-style-type: none">- Long list project pipelines- Shortlisted project pipeline- Loan documents- Project Information Memos documenting screening process and criteria- Funds committed per project- Loan agreements signed- Funds disbursed- Investments undertaken			

⁴⁴ This will be documented through follow-up surveys with participants.

⁴⁵ This will be measured through (a) systems established (e.g. number of GESIAPs improved, no. of GHG monitoring frameworks established) (b) outcomes demonstrated (demonstrated improvement in GHG monitoring capacity, demonstrated improvement in understanding of gender and social issues in project sponsor agency).

	monitoring progress, reporting, evaluation of impacts	<ul style="list-style-type: none"> - Development of loan agreements and negotiations with governments - Loan signing and loan effectiveness - Monitoring of progress, and evaluation at the end of the implementation period. 	<p>E</p> <ul style="list-style-type: none"> - Project progress reports - Project completion reports - Project evaluation reports
Component 2: Development of replicable and innovative climate finance models and structures			
2.1 Scaling up Green and Sustainable Bonds (for sovereigns, cities and SOEs)	Supporting scale up of green bonds through roadmaps and bond transaction support	<ul style="list-style-type: none"> - 2.1.1 Policy Enablers Roadmap Development (Early stage countries) - 2.1.2 Bond Issuance Roadmaps (Transaction-specific for Advanced Countries) 	<ul style="list-style-type: none"> - Green bond roadmap reports - Green bond standards study reports - Green bonds issued - News releases on green bond transactions supported - Second-opinion reports & third-party verification reports / certificates for bond transactions - Funds mobilized through green bonds
2.2 Innovative Green Finance Recovery Mechanisms (for low-emission projects)	Integrating innovative finance models into project concepts and structures	<ul style="list-style-type: none"> - 2.2.1 Rapid assessment studies to embed green recovery financing - 2.2.2 Structuring 'finance-ready' projects in difficult markets / sub-sectors 	<ul style="list-style-type: none"> - Rapid assessment studies (RAS) reports - Project feasibility reports and documents - ADB project RRs - Project due diligence documents - Climate baselines and assessments - ACGF Project Information Memorandums
2.3 Scaling up hybrid Public-Private Partnership structures (PPPs) for renewable energy and sustainable cities	Development of hybrid-PPP models for low-emission projects	<ul style="list-style-type: none"> - Conducting Project Feasibility, Preparation of Tender Documents and Marketing, tendering of Projects, Project Agreement Signing, Supporting Financial Closure 	<ul style="list-style-type: none"> - Project feasibility reports - Tender documents and marketing materials, marketing events - Project agreements - Financing agreements and contracts - Evaluations of bidder proposals
Component 3: Policy, knowledge and capacity building support			
3.1 Promoting national Green Finance Recovery strategies	Policy, knowledge and training on financing for green recovery	<ul style="list-style-type: none"> - 3.1.1. Knowledge and awareness raising through ASEAN Green Finance Investor Roundtables - 3.1.2. National Green Financing Strategies - 3.1.3. Targeted training through the ACGF 6 Champions program 	<ul style="list-style-type: none"> - Green recovery financing strategy reports - Green recovery financing model concept papers - Knowledge dialogues organized - Training events organized - Investor roundtables organized
3.2 Ensuring effective projects	Capacity building and institutional strengthening for improved implementation of low-emission projects	<ul style="list-style-type: none"> - 3.2.1. Institutional Systems Development (for climate impact monitoring, linking to monitoring of NDCs) - 3.2.2. Capacity Development (for integrating low-emission technologies & innovative financing approaches) - 3.2.3. Safeguards Frameworks Implementation (for effective safeguards implementation): - 3.2.4. Capacity development for effective mainstreaming of gender and social inclusion issues 	<ul style="list-style-type: none"> - On-the-job training provided - Assessments conducted to support gender & safeguards implementation - Additional experts supported to supplement project implementation capacity - Climate baselines and frameworks for projects

E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)

A. MONITORING AND EVALUATION

Monitoring and evaluation will be based on the results framework presented in this document, in line with GCF policies, and based on ADB systems for progress monitoring, reporting and evaluation.

The main parameters that will be monitored and reported at program and sub-project level will include:

- Emission reductions from GCF impact areas (i.e. fund-level impacts, see E3)
- Sector-relevant outcomes that will deliver emissions reductions e.g. clean energy generated or increased use of low-carbon transport (i.e. fund-level outcomes, see E4)
- Program performance across the three components e.g. ACGF GRP financing approved, co-financing mobilized, number of green bonds issued etc. (see E5).
- Program activities (see E6).
- Program performance on safeguards and gender and social inclusion.

In addition, a wider set of project and sector-specific variables will be monitored at sub-project level, as defined in the sub-project's Design and Monitoring Framework (DMF).

Program level: from ADB to GCF

As AE and EE for the program, ADB will be responsible for monitoring the implementation and results of the program as part of overall management. Monitoring will cover financial and technical aspects of program implementation, based on the results framework. The implementation of the ESMF and GESIAP will also be monitored.

At the start of the investment period and TA period, a baseline assessment will be conducted (in 2021-2022) for indicators included in the results framework, and a monitoring system will be established to collect and collate information from projects.

Dedicated monitoring capacity for the ACGF GRP will be included in the ACGF PST, and this expert will work with ADB project and country teams to monitor progress on sub-projects, and at the program level. Dedicated communications experts will also support the development of annual reports. Where needed, ACGF PST will provide guidance to ADB officers in charge of monitoring sub-project implementation on monitoring specific program impacts (e.g. CO₂ emissions).

Program level: reporting

ADB will prepare program-level **Annual Performance Reports** (APRs) in the format specified by GCF detailing:

- a) activities conducted during the year, status of implementation, potential issues and solutions
- b) progress against targets and indicators given in this proposal (see above)
- c) implementation of the ESMF and the GESIAP.

In the APRs will include further details about each sub-project approved, including rationale, description and screening against the criteria set out in this proposal. Impact potential estimates will be supported by a methodology note.

In addition to APRs, results from the ACGF GRP will also be featured in a broader **ACGF Annual Report**. These will be publicly available reports, documenting results, lessons learned, and impact stories from sub-projects, targeting ASEAN governments, development partners and other stakeholders. The reports will be made available on the ADB and ACGF website.

Project-level monitoring & reporting: from sub-projects to ADB

At a sub-project level, ADB project monitoring systems will be followed to track implementation progress and monitor outputs. As per standard ADB policies, every project will have in place a specific Design and Monitoring Framework (DMF) that will monitor impacts, outcomes, outputs and inputs. DMFs for ACGF GRP sub-projects will incorporate specific indicators that feed into program-level monitoring. During the loan implementation period, executing / implementing agencies of individual projects will prepare the following reports (these reports are disclosed in ADB website as per ADB Access to Information Policy):

- a) semi-annual progress reports which provide:
 - i. progress achieved by output as measured through the indicator's performance targets in the project level DMF,
 - ii. key implementation issues and solutions and
 - iii. updated implementation plan;
- b) consolidated audited and entity financial statements;
- c) semiannual environmental and social monitoring reports, including projects' environmental management plans; and
- d) a Project Completion Report within 6 months of physical completion of the project.

In addition to standard ADB monitoring, all projects under the ACGF GRP will be required to prepare independently validated progress reports during the loan implementation period (construction and up to five years of operations) to verify emissions reductions.

B. EVALUATION

A mid-term review of the program will be conducted in 2027 to a) take stock of emerging results from the technical assistance activities, b) portfolio distribution, projected impacts and implementation of the first phase of investments under the program c) performance on safeguards and gender and social inclusion. This will be an independent review, undertaken by an external team engaged for this purpose. Based on the review, an updated Gender and Social Inclusion Action Plan (GESIAP) will be prepared and finalized.

A final program evaluation will be conducted after the end of the implementation period (2040/2041) to evaluate program results and impacts.

F. RISK ASSESSMENT AND MANAGEMENT

F.1. Risk factors and mitigations measures (max. 3 pages)

In this annex we provide a summary of the ADB's risk framework and approach for the implementation of its operations, as well as tables with the analysis of risk specific to the implementation of the ACGF GRP at program level. The complex nature of the program – which is multi-country and multi-sector, involving a large number of stakeholders – will require the regular monitoring of risks. However, the level of key risks that have been defined as potentially affecting the performance of the program, are generally moderate and expected to be mitigated to a substantial degree by the design of the program, as well as ADB's established operational tools and control mechanisms.

Selected Risk Factor 1: Implementation delays due to COVID-19

Category	Probability	Impact
Technical and operational	Medium	Medium
Description		
Projects face implementation delays due to COVID-19 related lockdowns and travel restrictions.		
Mitigation Measure(s)		
Individual projects may face delays in a) conducting feasibility studies (which in turn could delay disbursements from GCF for the first phase of investment) b) initiating implementation of detailed design, and c) initiating construction due to COVID-19 related shutdowns. At a project level, ADB is already responding to this issue on ongoing projects, and is working with client governments to a) conduct meetings using virtual platforms, including for loan negotiations and b) mobilize local consultants to conduct aspects of feasibility studies that need on-the-ground work. The presence of country missions also helps ADB to work with governments to mitigate the impact of delays where possible.		

Selected Risk Factor 2: Lack of prioritization by governments of low-carbon projects

Category	Probability	Impact
Governance	Low	Medium
Description		
Borrower governments fiscal burden may not allow for external borrowing, and / or governments may choose to invest in non-green projects with external financing.		
Mitigation Measure(s)		
The program has been designed to mitigate this risk by a) using government financing more efficiently to mobilize capital, and therefore reduce the burden on public budgets, and b) support governments prioritize low-carbon projects through policy dialogue, targeted technical assistance, and funding for low-emission projects. The potential and opportunities for green financing for COVID recovery will also be raised with governments during ADB country programming discussions, as part of ACGF origination and project identification processes.		

Selected Risk Factor 3: ESS alignment

Category	Probability	Impact
Technical and operational	Low	Medium
Description		
Beneficiaries' limited capacity to comply with national regulations and/or ADB and GCF environmental and social policy requirements.		
Mitigation Measure(s)		
In order to identify and effectively address potential impacts from projects funded by the program, an Environmental and Social Management Framework (ESMF) is in place, in compliance with ADB Safeguards Policy Statement (SPS 2009), which will apply to any project that utilizes GCF funds through the program. ADB will apply its Safeguard Policy Statement (SPS 2009) and other relevant policies for all sub-projects. In addition, it will employ IFC Environmental, Health and Safety Guidelines (EHS 2007) to support assuring adequate measures are in place in subprojects. All ADB risk categories (A, B and C) of projects will be considered and the ADB safeguards		

requirements will apply to minimize potential risks. Training will be provided both for borrowers and project developers as may be required for subprojects.

Selected Risk Factor 4: Procurement

Category	Probability	Impact
Technical and operational	Low	Low
Description		
Lack of compliance with procurement rules and / or limited capacity in procurement issues		
Mitigation Measure(s)		
All procurement to be financed under the program must be carried out in accordance with ADB's procurement policy and regulations. As required, and on a project-by-project basis, ADB will support procurement processes and offer procurement training.		

Selected Risk Factor 5: Financial

Category	Probability	Impact
Credit	Low	Low
Description		
Lack of ability of borrowers to meet repayment of debts from the program		
Mitigation Measure(s)		
All loans from the program will be aligned with ADB and ACGF sovereign loans and thus be covered by the similar sovereign guarantees. As such the credit or loan default risk on repayment of program loans is low and related only to risks of the sovereign itself. To further ensure that underlying subprojects of the program are financially sustainable themselves and don't create a further burden on the sovereign government, the program and ACGF explicitly focus on developing financially bankable models at the subproject level itself, which is a criteria for lending from ACGF. This therefore double ensures that credit risk will not be a major issue for the program.		

Selected Risk Factor 6: Financial

Category	Probability	Impact
Forex	Low	Low
Description		
Volatile local currencies versus the USD loans from the program create financial viability stresses on underlying projects.		
Mitigation Measure(s)		
All lending including from the program and ADB will be assessed for financial risks in project specific financial models which include local currency to USD likely long-term swap rates. This should provide adequate comfort that project financials are able to cope with any future currency volatility. In addition in most sovereign loan projects, the sovereign government assumes currency risks before passing on loans to projects in local currency. This also provides adequate comfort on this risk, with sovereigns better able to match currency outflows and inflows.		

Selected Risk Factor 7: Lack of co-financing or parallel financing for sub-projects

Category	Probability	Impact
Technical and operational	Low	Low
Description		
Co-financing from ADB does not materialize which results in a financing gap for sub-projects		
Mitigation Measure(s)		
At a minimum, ADB co-financing will be identified for every project due to a) projects being selected from ADB country pipelines with pre-identified allocations from ADB country programs b) sub-project eligibility criteria requiring at least 30% co-financing from ADB. There is minimal risk of a lack of ADB financing for sovereign projects in the region – ADB has significant sovereign operations in Southeast Asia, with annual commitments of over USD 5 billion per year, in 2018 and 2019, and an estimated USD 11 billion in 2020. In addition, ADB's projected pipeline in the region as documented in country operations business plans, is estimated at over USD 11 billion, per year between 2021 and 2023.		

In addition to ADB co-financing, several partners have signed MOUs and letters of commitment to proactively work with the ACGF PST to identify parallel financing for ACGF projects, and these arrangements will benefit sub-projects under the ACGF GRP as well. In addition, at a corporate level, ADB has signed framework agreements with several development partners to facilitate financing for projects, and regularly works with partners to consider financing opportunities. These mechanisms will be fully leveraged for ACGF GRP sub-projects if needed.

Selected Risk Factor 8: Money laundering, terrorist financing and prohibited practices

Category	Probability	Impact
Prohibited practices	Low	Low
Description		
GCF financing through ACGF GRP results in money laundering, terrorist financing or other prohibited practices.		
Mitigation Measure(s)		
GCF financing will be provided as loans to sovereign and sovereign-backed entities, and no funds will be provided as direct distribution of goods or cash transfers, which reduces the risk of this financing being used to support prohibited practices. As GCF funds will be provided alongside co-financing from ADB, ADB Integrity Principles and associated due diligence will apply at sub-project level, which will also mitigate this risk.		

G. GCF POLICIES AND STANDARDS

G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

The ACGF GRP Environmental and Social Management Framework (ESMF) has been developed to ensure that environmental and social risks and impacts from all sub-projects under the program will be minimized and mitigated to acceptable levels (see Annex 6). As a program managed by ADB, ADB's safeguards policies and requirements as outlined in ADB's Safeguard Policy Statement (SPS) will be followed for every sub-project that receives funds from ACGF GRP.

As per ADB SPS, every sub-project will be initially reviewed for technical and financial merit before being subject to safeguards screening, review and assessment. The ESMF presents the roles, responsibilities, and procedures in place to avoid, minimize, and mitigate any direct, indirect, cumulative, and induced:

- a) adverse impacts and/or risks on the environment;
- b) adverse impacts and risks of involuntary resettlement; and
- c) adverse impacts on indigenous peoples⁴⁶ and their communities that may arise from the implementation of sub-projects.

All sub-projects under the ACGF GRP will be processed by ADB, and will be subject to meeting the objectives and requirements of ADB's SPS. In addition, and as required as per ADB's SPS, ADB will employ IFC Environmental, Health and Safety (EHS) Guidelines to ensure adequate measures are in place in projects.⁴⁷

As per ADB's SPS, ADB will not finance sub-projects that do not comply with its safeguard policy statement, nor will it finance sub-projects that do not comply with the host country's social and environmental laws and regulations, including those laws implementing host country obligations under international law. In addition, ADB will not finance activities on the prohibited investment activities list (SPS Appendix 5). All ADB safeguard categories (A, B and C) of sub-projects will be considered and the ADB safeguards requirements will apply to avoid, minimize, mitigate, and compensate potential risks and impacts.

In the implementation of this ESMF and ADB's SPS, ADB will work with borrower governments to ensure that all potential ACGF GRP sub-projects will:

- i. be screened, categorized, and properly appraised in terms of their environmental and social impacts and risks in line with ADB's SPS and agreed actions, if any, are identified to fulfill gaps.
- ii. be reviewed and evaluated against national policies, laws, regulations and standards on environment, health, safety; involuntary resettlement and land acquisition; indigenous peoples and physical cultural

⁴⁶ It is noted that countries use a range of terminology to refer to indigenous people.

⁴⁷ International Finance Corporation. Environmental, Health and Safety Guidelines.

www.ifc.org/ehsguidelines

- resources; and meaningful public consultation;
- iii. address gender and development issues, including through meaningful consultation where relevant (including women and tailored to the needs of disadvantaged and vulnerable groups);
- iv. establish a grievance redress mechanism (GRM) to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental and social safeguards performance;
- v. include in contracts with civil works contractors, subcontractors and other providers of goods and services provisions to employ local labor wherever possible, and to ensure compliance with ADB's social safeguards requirements and international core labor standards, as defined in ADB's Core Labor Standards Handbook.⁴⁸

The interim ESS standards currently applied by the GCF are the International Finance Corporation (IFC) Environmental and Social Performance Standards. As an accredited entity of the GCF, ADB's SPS and procedures at an institutional level are aligned with GCF ESS standards.

Table 9. Summary of ADB Safeguards Requirements for environment, involuntary resettlement and indigenous peoples

Category (Risk Rating)	Environmental Safeguards	Involuntary Resettlement Safeguards	Indigenous Peoples Safeguards
Category A (with potential significant impacts)	Comply with (i) Safeguard Requirements 1 of the ADB SPS (2009) and (ii) national laws. Prepare EIA (with EMP). Retain qualified and experienced external experts to verify compliance.	Comply with (i) Safeguard Requirements 2 of the ADB SPS (2009), including RP preparation with social assessment, submission, & actions (as deemed relevant by ADB)	Comply with (i) Safeguard Requirements 3 of the ADB SPS (2009), and (ii) national laws. Prepare and follow processes as deemed relevant by ADB. Broad community support as outlined in the ADB SPS (2009) must be obtained. Meaningful consultation must be conducted and documented. Prepare an IP Plan (IPP)
Category B (with less significant impacts)	Comply with (i) Safeguard Requirements 1 of the ADB SPS (2009) and (ii) national laws. Produce an IEE (with EMP). Disclose IEE prior to project approval.	Comply with (i) Safeguard Requirements 2 of the ADB SPS (2009) and (ii) national laws. Prepare an RP with social assessment.	Comply with (i) Safeguard Requirements 3 of the ADB SPS (2009), and (ii) national laws. Prepare and follow processes as deemed relevant by ADB SPS (2009). Broad community support must be obtained. Meaningful consultation must be conducted and documented. Prepare an IP Plan (IPP).
Category C (with minimal or no impacts)	Review environmental implications. Comply with national laws.	Assess if there are any IR impacts and prepare a Due Diligence Report (DDR). Comply with national laws	Comply with (i) Safeguard Requirements 3 of the ADB SPS (2009), and (ii) national laws. Assess if there any IP impacts and prepare a DDR. Comply with national laws
Category FI	Investments have potential for environmental and social risks (Category A and B): establish an environment and social management system (ESMS) as part of overall FI management system. For any sub-project with significant risks, ADB clearance of EIA required before subproject approval.	Investments have potential for involuntary resettlement (Category A and B) risks: establish an environment and social management system (ESMS) as part of overall FI management system. For any sub-project with significant risks, ADB clearance of RP required before subproject approval.	Investments have potential for indigenous peoples (IP) risks (Category A and B): establish an environment and social management system (ESMS) as part of overall FI management system. For any sub-project with significant risks, ADB clearance of IPP required before subproject approval.

ADB = Asian Development Bank; EIA = environmental impact assessment; FI = Financial Intermediaries; IEE = initial environmental examination; IPP = indigenous peoples plan; IR = involuntary resettlement; RP = resettlement plan; EMP = environmental management plan.

⁴⁸ ADB, ILO. 2006. Core Labor Standards Handbook. Manila.

G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

A program-level gender and social inclusion action plan (GESIAP) has been prepared (see Annex 8) to integrate aspects of gender-sensitive development into the design of the ACGF GRP. As an ADB-managed program, the ACGF GRP GESIAP builds on existing ADB systems to integrate gender mainstreaming and social inclusion into sovereign projects.

At a corporate strategy level, ADB is committed to support gender equality through gender-inclusive project designs in at least 75% of its sovereign and non-sovereign operations by 2030. ADB's Gender and Development Framework Policy⁴⁹ is supported by a four-tier gender mainstreaming categorization framework with associated targets applying to sovereign operations (see Table 10). Targets for ADB operations require that at least 71% of projects must have gender elements in the project concept/design (classified as SGE/GEN or EGM by ADB "at entry") by 2024 and at least 50% are categorised under ADB's gender mainstreaming categories directly addressing gender equality (GEN or EGM).

Table 10. ADB gender mainstreaming categorization framework

Category	Description
Gender Equity Theme (GEN)	A project is assigned GEN if (i) the project outcome directly addresses gender equality and/or women's empowerment by narrowing gender disparities through access to social services (e.g. education, health, and water supply/sanitation); and/or economic and financial resources and opportunities (e.g. employment opportunities, financial services, land, and markets), and/or basic rural and urban infrastructure (e.g. rural electrification, rural roads, pro-poor energy distribution, and urban services for the poor); and/or enhancing voices and rights (e.g. decision making processes and structures, political empowerment, and grievance mechanisms)
Effective Gender Mainstreaming (EGM)	A project is assigned EGM if the project outcome is not gender equality or women's empowerment, but project outputs are designed to directly improve women's access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment.
Some Gender Elements (SGE)	A project is assigned SGE if by its nature it is likely to directly improve women's access to social services; and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhance their voices and rights, but that included little, if any gender analysis and few or no specific design features; or is unlikely to directly improve women's access to social, economic or financial resources or opportunities, but significant efforts were made during project preparation to identify potential positive and negative impacts on women.
No Gender Elements (NGE)	Project has no gender elements in place.

ACGF GRP GESIAP builds on ADB targets, and adopts a program level target of '80% of ACGF GRP projects directly advance gender equality and social inclusion in infrastructure through economic empowerment activities, increased access to services, and enhanced participation in decision making processes or institutions', by close of the facility (i.e. 2039). Due to the multi-sector nature of the program, cross-sectoral actions (with associated targets and indicators) are included in the GESIAP to enable broad mainstreaming of gender and social inclusion across the program:

- ACGF GRP sub-projects prepare and implement a gender equality and social inclusion action plan (GESIAP)
- ACGF GRP sub-projects include green jobs for women and vulnerable groups, applying core labor standards including pay equity and flexible working conditions, as well as female friendly worksites and sex-suitable personal protective equipment
- Equitable participation of females and males in green technology technical and vocational training activities and certification

⁴⁹ ADB [Gender and Development](#)

- Support for women's economic empowerment in ACGF GRP sub-projects through (where applicable) business skills training and access to financial inclusion programs
- Programs implemented through financial intermediaries deliver tangible benefits to women and vulnerable groups through improving their access to decision making in financial management and leadership roles.
- ACGF grant funded policy, knowledge and capacity building events advance gender equality and social inclusion

The ACGF GRP GESIAP will be implemented by ADB as GCF AE as well as Executing Entity (EE) for the ACGF GRP. At a program level, ADB will monitor the implementation of the GESIAP, based on monitoring by ADB sub-project teams. This role will be included in the functional responsibilities of the team managing the ACGF GRP in ADB Southeast Asia Department. In this role, ADB staff managing the ACGF GRP will work closely with gender specialists that monitor gender and social inclusion across ADB's overall portfolio in Southeast Asia as well as sub-project specific gender experts.

G.3. Financial management and procurement (max. 500 words, approximately 1 page)

ADB systems for financial management, audit and procurement will apply for all sub-projects supported by GCF funds under the ACGF GRP.

Financial Management and Audit. Details of every projects' financial accounting, disbursement procedures and auditing requirements will be developed during preparation of each project, in accordance with ADB's policies on Financial Management and Analysis of Projects and will be included their respective project administration manuals. The loan proceeds for all ACGF GRP projects will be disbursed in accordance with ADB's Loan Disbursement Handbook (2017, as amended from time to time), and detailed arrangements agreed upon between the respective governments and ADB. Public disclosure of the audited project's financial statements, including the auditor's opinion on the subproject financial statements, will be guided by ADB's Access to Information Policy 2018.

Procurement. Procurement of consulting services to support the execution of the technical assistance grant will be in accordance with ADB's Procurement Guidelines (2017, as amended from time to time). All procurement for ACGF GRP projects will also be done in accordance with ADB's Procurement Guidelines and Procurement Regulations for ADB Borrowers (2017, as amended from time to time), and will be done by the Implementing Agencies for each project. To the extent possible, ADB staff will support procurement processes and offer procurement training. Procurement plans for the respective projects shall be in accordance with their respective project administration manuals. A detailed procurement plan for use of GCF grants for technical assistance will be included in Annex 10.

Implementation of the program, particularly on the projects, shall conform to all applicable ADB policies, as amended from time to time, including those concerning anticorruption measures, anti-money laundering, counter terrorist financing, safeguards, gender, procurement, consulting services, and disbursement.

G.4. Disclosure of funding proposal

☐ No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.

☒ With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:

- ☐ full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
- ☐ redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

H. ANNEXES

H.1. Mandatory annexes

- ☒ Annex 1 NDA no-objection letter(s)
- ☒ Annex 2 Pre-feasibility / feasibility study
 - 2.A. Project reports and project concepts
 - 2.B. Assessment of climate and COVID-19 baseline for Southeast Asia
- ☒ Annex 3 ACGF GRP Financial Model V1
- ☒ Annex 4 Detailed budget plan
- ☒ Annex 5 Implementation timetable including key project/programme milestones
- ☒ Annex 6 E&S document corresponding to the E&S category I1:
 - ☐ Environmental and Social Impact Assessment (ESIA) or
 - ☐ Environmental and Social Management Plan (ESMP) or
 - ☒ Environmental and Social Management System (ESMS)
 - ☐ Others (please specify – e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People's Plan, Land Acquisition Plan, etc.)
- ☒ Annex 7 Summary of consultations and stakeholder engagement plan
- ☒ Annex 8 Gender assessment and project/programme-level action plan
- ☒ Annex 9 Legal due diligence (regulation, taxation and insurance)
- ☒ Annex 10 Procurement plan
- ☒ Annex 11 Monitoring and evaluation plan
- ☒ Annex 12 AE fee request
- ☐ Annex 13 Co-financing commitment letter, if applicable ([template provided](#))
- ☒ Annex 14 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

H.2. Other annexes as applicable

- ☐ Annex 15 Evidence of internal approval ([template provided](#))
- ☐ Annex 16 Map(s) indicating the location of proposed interventions
- ☒ Annex 17 Multi-country project/programme information
- ☐ Annex 18 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
- ☐ Annex 19 Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
- ☐ Annex 20 First level AML/CFT (KYC) assessment
- ☐ Annex 21 Operations manual (Operations and maintenance)
- ☒ Annex 22 GHG emissions reduction model
- ☒ Annex 23 ACGF Eligibility Criteria and additional documentation

** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*